

MOTOR AGE

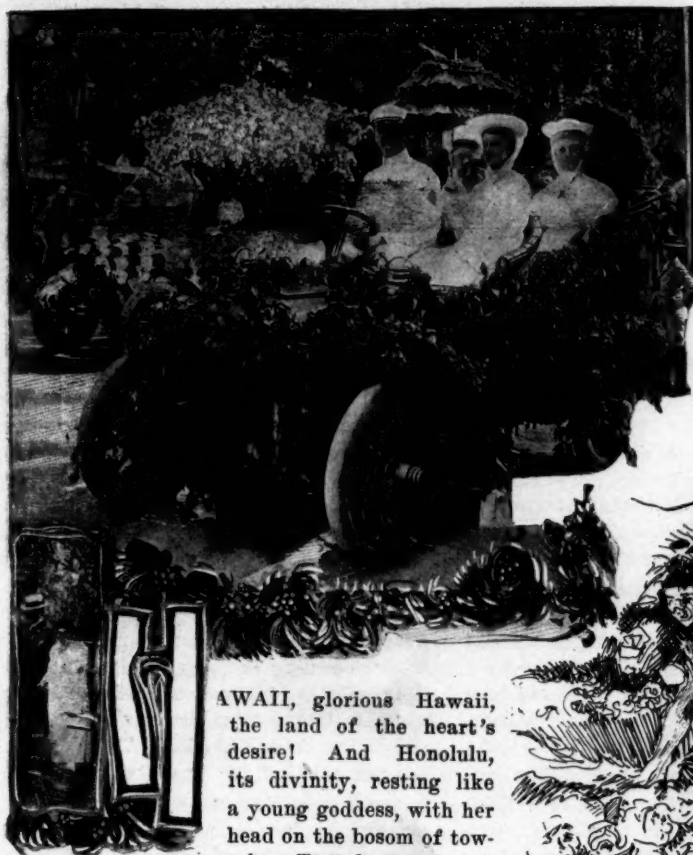
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HONOLULU A MOTORING PARADISE

MARSTON CAMPRELL'S STRIKING LOOKING OUTFIT IN PARADE



AWAII, glorious Hawaii, the land of the heart's desire! And Honolulu, its divinity, resting like a young goddess, with her head on the bosom of towering Tantalus, and her

feet bathed in the warm tropical waters of the Pacific! What a place for automobiling!

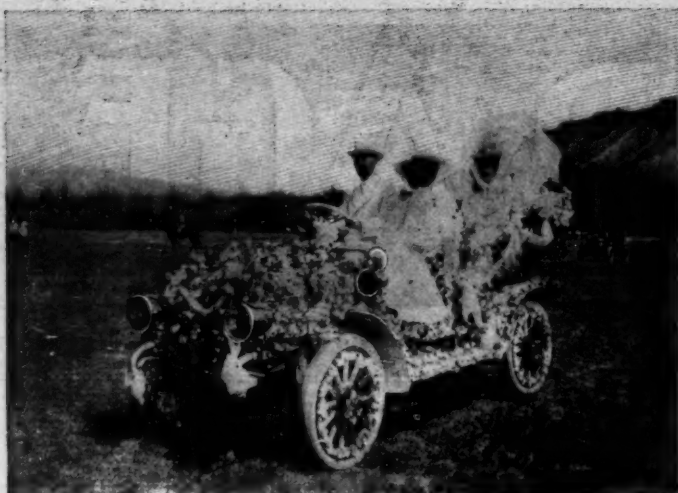
The Hawaiians take the greatest pride in their fine, smooth roads, and one may make a complete circle of the whole island of Oahu, leaving the city of Honolulu from one side and entering it on the other, traveling the whole distance within sight of the Pacific. For short trips, there is the run up Punchbowl, a small extinct volcano, just back of the city; for a hill-climbing effort, there is old Tantalus; for one of the pleasantest spins on a perfect boulevard, there is nothing like a trip to the Nuuanu Pali, the latter being a pass in the range of mountains which crosses the island of Oahu. There is a perfect, gradual ascent up to this pass from Honolulu and an abrupt drop on the other side. Upon reaching this point, the whole expanse of windward Oahu bursts upon the eye, and the Pacific dazzles in the distance. The mountains separate in a triangle, and the view meets the eye like the focus of a great panorama. Travelers say there is nothing to surpass it. Before the splendid road which now crosses it was graded out, and while the island was in its wild state, old King Kamehameha, who was the first to reduce all the

tribes to the rule of one man, routed hostile bands by driving them up the Pali and then over the precipice in which it ended. It is said the bones of his unfortunate enemies are still to be found if one would dig below the foliage which is now growing on the spot. Then there is the run to Waikiki beach, the bathing resort of Honolulu, where one may refresh himself by a plunge in the Pacific, and, still in his bathing suit, mount one of the out-rigger surf boats manned by two expert Kanakas, paddle out toward the reef which makes Honolulu bay such a protected harbor, and then return at racehorse speed, booming along the course of a towering wave which has broken over the reef and rears its crest above the head of the daring voyager. The canoe, held on its course by a boatman at the stern, dances along like an egg-shell, and never stops until the wave, spent at last, breaks in ripples on the beach. One may go further than Waikiki—to Diamond Head, the old volcano, which stands like a silent sentinel to the right of the harbor, and is the first land to be sighted by approaching vessels. Out to the left of the city is the Moana Loa road, which leads one finally through the sugar cane section of the island and to Pearl harbor, which the United States is contemplating dredging out and using for a great naval station for its own use as soon as it can be done.

The tourist is content for quite a while merely to travel around, admiring the beautiful palms, the labyrinth of luxurious



JAPAN'S GREAT FLORAL EFFORT—CAR OF H. FUJIKAWA



C. VON HAMM IN THE WINNING WINTON



REPRESENTATION OF MOTOR BOAT DRIVEN BY C. W. CHAPIN

foliage, the comfortable residences with their wide lanais, and the tropical strangeness of the scene. The people of Honolulu are well-to-do, and they are looking for means of entertaining themselves and enjoying the outdoor recreation their beautiful island affords; they have taken to automobiling as the best thing they

have yet found. Motor cars have made a hit and are to be seen everywhere. The pioneer firm handling these machines is the Von Hamm-Young Co., the agent of the White car in the islands. Alexander Young is one of the first settlers in the islands and one of its best known residents and business men. He is the owner of the hotel called by his name, which would do credit to

any metropolis. Back of the hotel is the Von Hamm-Young garage. These people have done more to promote automobiling in the islands than any other concern. The islanders have a way that is all their own, and some unique ideas which they have worked out for themselves. Their manner of celebrating Washington's birthday is something which might well be copied elsewhere if climatic conditions would allow. Honolulu, on that day, is completely given over to its annual floral parade. It is a feature of Hawaiian life that is looked forward to for weeks ahead and talked over in retrospect for weeks succeeding. The culmination of the celebration is now the automobile section. More time and ingenuity are lavished upon the preparation of cars for this event than such an affair gets elsewhere. All automobilists turn out in line, and all give their cars the greatest attention. The consequence is that each machine is a thing of beauty and the ensemble effect is remarkable.

One of the most successful parades in the history of the islands took place on last Washington's birthday. There were thirty decorated automobiles in line, and these were divided into three divisions. The committee having the matter in charge was liberal in its offer of prizes, and there was great competition in the effort to be among the prize winners. Surprising diversity of cars was noticeable, the leading makes being represented.

First prize in class A went to C. C. Von Hamm, of the Von Hamm-Young Co., whose Winton car was a mass of cherry blossoms. The color scheme had been most elaborately and beautifully worked out in pink and blue chiffon with asparagus fern, and the

judges' selection was unanimously approved by the many spectators as well as the rival contestants for the honor.

Second prize in class A was awarded to C. W. Chapin. His car was even more elaborately decorated than that of the winner, but the delicacy and daintiness of the former won it first honors. Mr.

Chapin's car was converted into a motor boat, banked with roses, and bearing the name Aloha worked in flowers on the bow of the boat. The crew consisted of Mrs. Chapin, Miss Olmsted, of Newport, R. I.; Miss Wood, of St. Paul, Minn., and Miss Winifred Brown. Each of the women carried a white parasol edged with pink roses. The chauffeur was dressed as a sailor. Third prize went to Alexander Young, whose Winton was the largest car in the parade. Sweet peas interwoven with baby ribbon were elaborately used in the decorations. A handsomely decorated car was Mr. Baird's White steamer, which was a mass of yellow almander blossoms, upon the front of which hovered an immense butterfly.

For uniqueness of design there was nothing in the parade equal to the turnout of H. Fujikawa, a prominent Japanese. Under the bright blossoms of a cherry tree were two riders attired in full Samura armor, dazzling in red and gilt, while the body of the car was decorated in red, white and blue blossoms arranged to represent the American flag. The Japanese emblem covered the back of the vehicle. A special merit prize was awarded to this car by the judges, who agreed that the effort was worthy of reward.

Still another exceptionally attractive car was a little Franklin runabout, which was made to represent an Hawaiian grass hut, the primitive dwelling of the natives.



PRIMITIVE HUT ON WHEELS



CLASS A HEAVY TOURING CARS



J. S. BELL, OF MINNEAPOLIS, WINNER OF SECOND PRIZE

It is needless to say that this attracted a great deal of attention. The hut contained native Hawaiians, who played and sang native airs. The car was owned by Hackfeld & Co., a well-known mercantile concern of Honolulu. H. Reinecke was in charge of the car and the music was furnished by Jim Kahauanu and H. W. Kaehu. Julia Kaoulilani posed as the hostess. A car very appropriate to the occasion was an Olds runabout, decorated in colonial style, the two occupants of which, Spencer Bickerton and J. Vitlesen, were dressed as continental soldiers of the revolution.

Strongly suggestive of the islands was the car driven by Marston Campbell, automobile manager of the Von Hamm-Young Co. On his machine native huapala blossoms were used with striking effect and he received much applause.

A prettier spot for the grouping of the cars for photographic purposes and the awarding of prizes could hardly be imagined than the one chosen. It was in the most picturesque portion of Kapiolani park, down near Waikiki beach. The parade ground was bordered by cocoanut palms and alagrobos, making a truly enchanting place. This park is one of the most beautiful features of beautiful Honolulu. Old Diamond Head rises sheer in the background, making a striking relief to the automobile scene.

The day was an ideal one. The few

white clouds that floated across the sky in the early morning and kept people guessing, drifted idly away as the day wore on and the sun smiled down from the deep blue of the southern skies, playing in light and shadow on the beautifully decorated cars, the striking splendor of the pa-u riders and the gay garments of the people. Nature is always kind in this land of the heart's desire and has only caresses for its children.

Clouds hovered over Tantalus and now and again its somber hue was illumined by a fleeting rainbow, but in the city not one drop of water fell to mar the day's pleasure. The people were in touch with nature; everyone rejoiced and mirth and gayety

filled the air. The city was astir early; in fact, many an automobile owner worked all night putting his car in shape for the day's exhibition. Flowers will fade even in balmy Honolulu, and those which were latest plucked and festooned looked the freshest and gayest. So many an owner looked a little the worse for



PUPILS OF KAMEHAMEHA SCHOOL IN THE PARADE

wear, but none begrudged the lost sleep in the success of the night's labor in the Washington's birthday parade.

It would hardly be just to this parade to omit some of the other features. There was a cavalcade of cowboys that attracted much attention. There were a number of interesting floats, and these were followed by tally-hos, tandems, spike teams and every other style affected by horsemen, the whole beautiful with Hawaiian flowers and shrubs.

Next came the pa-u riders and the cowboys, the latter ranging from veterans down to tiny riders on Shetland ponies. The pa-u riders need a word of explanation. This name is derived from the divided and flowing skirts of the riders.



CONTINENTALS IN OLDSMOBILE

This can hardly be called an ancient custom of Honolulu, for Vancouver brought the first horses to the islands; yet the Hawaiians seem to have disregarded the side saddle from the beginning, and their artistic designing of the pa-u skirt, and wearing it of all colors, made their horsemanship highly picturesque. These riders made the gayest division of the procession. Their skirts were of brightest yellow, scarlet, variegated colors, polka dot and Dolly Varden patterns. Most of the women had velvet capes and silk fingers, which added richness to their costumes. They imparted a flashing of color and action which brightened the parade wonderfully.

Such, in brief, is the Honolulu celebration of the birthday of America's greatest patriot. Little did he think in his time that over a century later his memory would be celebrated in islands of the Pacific of which he had probably never heard. Certainly, he never dreamed that automobiles would take up the celebration.



LINED UP IN KAPIOLANI PARK

COMES BACK NEW WAY

Megargel Changes Return Route of Reo Mountaineer Because of New Mexican Roads

Las Vegas, N. M., March 14—Owing to the condition of the wagon roads along the Santa Fe railroad, it has been decided to change the original route laid out for the return trip of the transcontinental automobile, the Reo Mountaineer, and take in Denver and the Union Pacific route back through Kansas City, instead of following the Santa Fe through La Junta and on into Kansas.

From now on the Reo will be running over territory that has already been covered by an automobile, for W. C. Vaughan toured from Buffalo to Santa Fe in his car 2 years ago and John Catron brought his White steamer from Buffalo to Denver and then down to Santa Fe. Their routes, however, were different and after talking over the situation with both I have decided to run north as far as Denver, then hit it up toward the east along the Union Pacific railroad.

Catron and his brother accompanied the Reo Mountaineer from Santa Fe to Las Vegas and will continue with us as far as Denver and possibly further. He is driving a Stanley steamer. At Las Vegas we found three automobiles, a Reo, Cadillac and Ford, the owners of which will all accompany us as an escort for several miles north toward the Raton mountains. It will probably be between Raton and Trinidad that we encounter our worst road, as the mountain is frightfully steep at this point and the road more or less washed out by recent storms.

From Trinidad to Denver, through Colorado Springs and Pueblo, is considered a wonderfully fine drive and we have hopes of making Denver by Saturday night if we manage to cross the Raton pass without serious trouble. There was an inch of snow on the ground here in the city when we awoke this morning and just how deep it is up in the Ratons can only be surmised.

Our muffler, which we broke off by striking a high stump, near Golden, will have to be replaced before we can venture into Denver as I have been given to understand that Colorado has some automobile laws, the quietness of the muffler being one of the things mentioned. New Mexico has no automobile laws and our speed is only governed by the condition of the roadbed and the grade of gasoline we are able to procure.

While almost out of the Indian country we occasionally run across a few redskins. We recently attempted a Navajo conversation, but about the only word that both of us knew was "chennie," meaning devil, the general term applied to automobiles by the redskins. We have acquired a few more words in Mexican, but now the

Catron boys are with us we let them do the talking, both John and Charles being well versed in Spanish, a language more spoken in Santa Fe than English.

Before leaving Santa Fe, Governor Hagerman took a spin in the Reo Mountaineer, off across the prairie at a 30-mile clip. Although a horseman and large ranch owner, the governor is very fond of automobilizing and is the owner of a motor cycle. There being no speed laws in New Mexico we certainly let the Reo out some on the prairie road and although the chief executive only touched the seat between the high spots he thoroughly enjoyed his ride—at least he said he did and invited Fassett and myself to accompany him into his executive chambers. Governor Hagerman is the youngest governor that has ever occupied so important a position in this country. A big smooth-faced boy he looks, but one or two of his moves since ascending to the throne of New Mexico have clearly demonstrated that he is a man of tremendous will power and one fully qualified to occupy the position he does.

There being no automobile garage in Las Vegas and the liverymen hesitating about allowing an automobile to be stored in their stables, Dr. Smith, the Reo owner, came to our rescue and arranged to store both the Reo Mountaineer and Stanley steamer in the armory of Troop A cavalry. At last night's drill the two machines were inspected by the New Mexican rough riding national guardsmen, many of them wondering how long it would be before the automobile took the place of their own fiery little bronchos, on which many of this troop distinguished themselves in President Roosevelt's own regiment of rough riders during the Spanish-American war.—PERCY F. MEGARGEL.

THERE WITH THE GOODS

Indianapolis, Ind., March 19—While this city is snowbound, there is much favorable comment on the service automobiles are giving, where vehicles of every other description, including street cars, are practically unable to move a wheel. In the last 12 hours at least 14 inches of snow has fallen. Business is at a standstill, street cars are not running, and with the exception of an automobile now and then, few vehicles are seen on the street. Automobiles, of course, are only out where necessity absolutely demands it, and they are doing remarkable work. All of the department stores, however, are not operating their commercial cars. The street car barns were wrecked to-day and physicians sent to attend the unfortunate employees who were caught in the wreckage hastened to the place in a big automobile. All of the factories are running demonstrating cars on the streets to show what service they can accomplish under adverse conditions that have not existed in 40 years. Automobile dealers report that business is temporarily dead, but the factories are half glad of an opportunity to catch up on their pile of back orders.

TO MEET EDGE OFFER

Darracq Says He Will Guarantee Deliveries if Other French Makers Do the Same

Paris, March 6—S. F. Edge's latest coup of a 3 years' guaranty on Napiers and the \$100 a week indemnity fee has stirred the French makers up as nothing else ever sprung by a British manufacturer. It was Edge's intention to deal the French makers a blow, for he believed it would be impossible for many of them to guarantee delivery, while the long guaranty was expected to be another one below the belt. However, one French maker has already taken up the defi and M. Darracq, on behalf of his firm, announces that if others will do the same he will meet the English offer with a similar one.

M. Darracq has stated that in order to insure himself against loss through this indemnity clause he will take steps to obtain a strict regularity in the production of his shops. He will invest more capital in machinery and otherwise increase his capacity. This is the first recognition by French makers of the seriousness of the English rivalry.

On the other hand M. Darracq agrees with the opinions expressed by other well-known French constructors, including MM. Brasier, de Dion, de Knyff, Giradot, Serpollet and also the Mercedes representative, M. Charley, to the effect that a guaranty against constructional defects for 3 years is unnecessary and in fact impossible for any serious-minded firm, which anyway would, without any guaranty, make good defects showed themselves within a reasonable time, due to faulty design, workmanship or material. In fact, it is protested, this is what the trade now does. It cannot be too often repeated that anything which tends to guarantee a delivery by any definite date, under penalty, strikes a hard blow at French enterprise—it goes straight to the weak spot, and French constructors know it well, but do not care to admit the fact.

Discussing the Edge proposition Richard Brasier says: "It is impossible to guarantee the good service of a car during 3 years. Small parts are sure to require replacement, and there is always the element of the unforeseen. We construct cars which are conscientiously made and will in all probability furnish a much longer regular service to their owners. This is no specialty with French cars—French makers have been constructing on these lines for years. With the uncertain element of a careless or incompetent driver, however, no maker would care to undertake the costs of the necessary repairs, unless making special provisions in the selling price of the car. As regards the delay of delivery and penalties, a firm which has a large clientele cannot afford to make such strict promises in view of the

fact that to live up to them a large stock must be carried."

"The idea is at first sight very interesting," says Marquis de Dion. "But how can the normal wear and tear be determined? If the customer is not in accord with the constructor on this point, who is to decide? Experts? If so, the French system is immediately resorted to. Here, if a car does not give results, the good name of the firm affords a guaranty for immediate repairs. Otherwise the matter is referred to experts. This has been done for years in the French industry. As regards penalties for delay, if there is no saving clause in respect to strikes and lockouts, it will ruin Mr. Edge's firm in this eventuality, unless he keeps an immense stock of cars."

OLYMPIA SHOW DIVIDED

London, March 10—The British Society of Motor Manufacturers has definitely decided to divide its annual show into two sections. This policy has been long foreshadowed and it has caused little comment now, it has been announced. The usual Olympia dates, which this winter will be from November 15 to November 24, will be devoted entirely to the pleasure vehicle, and the second Olympia date, which will be somewhere early in April, 1907, will be as entirely devoted to the commercial vehicle and the marine section. It is generally considered that there will be a difficulty in making the April show financially successful, as it is admitted that it is the pleasure vehicle which attracts the public, and without the public the huge expenses of Olympia will be somewhat difficult to overtake. On the other hand, however, it is expected that by that time the expansion of the business automobile, which has been very slow up to the present in this country, will have been advanced to such a stage as will induce an amount of business at the show such as will more than compensate the exhibitors for the expenses they will incur. It is probable that by that time the motor bus boom, which is now gathering a full head, will have fairly spent its force.

ANOTHER BILL

New York, March 19—Following a provision in the proposed New Jersey automobile law, A. E. Lee has introduced a bill in the assembly at Albany, which has been reported favorably by the committee on general law, and provides that when the driver of a motor vehicle meets a person riding, leading or driving a horse he shall, when within 20 rods of such horse, reduce the speed of his car to a rate not greater than 1 mile in 6 minutes, and if the horse appears restive or frightened bring his car immediately to a full stop at the distance of 10 rods from the horse, unless the person riding, leading or driving the horse shall give his consent not to stop by voice, nod of head or wave of the hand to the automobilist in his car.

KEEP UP FIGHT ON TAX

First of Series of Speeches on Free Alcohol Delivered in House of Representatives

Washington, D. C., March 16—The first of a series of speeches on free alcohol was delivered in the house of representatives this week by Representative Marshall, of North Dakota, who presented a mass of facts and figures on the subject and who aroused the house to a high pitch of enthusiasm over the proposed removal of the internal revenue tax on grain alcohol used in the arts and industries. He said the removal of this tax had within it such tremendous possibilities for the good of the whole people of the United States that he would be derelict did he fail to voice his earnest desire to see this legislation perfected. He said that the tax imposed on denaturized alcohol is from 1,200 to 2,000 per cent of its cost to manufacture, and therefore effectually prohibits its use in countless manufactures and completely prevents its use for power purposes. The proposition, he pointed out, is to permit the removal from bond, without tax, of denaturized alcohol, and by thus permitting the use of this tax-free alcohol American manufacturers and consumers will be put on a footing with those of other nations.

Touching on the subject of internal combustion engines, Mr. Marshall said few realize the size of the gasoline or internal combustion engine industry. Mr. Capon, representing the Detroit board of commerce, made the following remarkable statement during the hearings: "Detroit alone will produce in 1906 enough gas engines for automobile, marine and other uses to consume 200,000 gallons of fuel a day."

"Is it any wonder," continued Representative Marshall, "that gasoline has practically doubled in price in a few years? And in view of the fact that only 2 per cent of gasoline can be made from petroleum, we are soon to face a famine in fuel for such engines unless relief is afforded. It is well known that the largest percentage of automobiles are driven by gas engines. Agricultural implement manufacturers are preparing to turn these engines out by the thousands adapted for farmers' use. The time is near at hand when every farmer will have one to pump water, haul his feed, unload his hay, and, ultimately, to do much of the trucking and drudgery of the farm and transport himself and family.

"In a general way it is conceded alcohol will displace the use of gasoline in internal combustion engines. Some difficulties there are which will have to be overcome, one of which is the fact that alcohol volatilizes more slowly than gasoline, thereby making the engine harder to start. This is met by adding a percentage of gasoline to the alcohol or by starting the engine

with gasoline. The combination of alcohol and gasoline makes a perfect fuel for engines."

Representative Marshall reviewed the question in all its phases and was greeted with prolonged applause. The effect of his speech has been to give the cause of free alcohol a decided impetus. It is believed by automobilists as well as manufacturers that the agitation now going on for a removal of the tax will result in some action by congress in view of the increasing price on gasoline, not alone in this country, but in Europe.

A. C. A. TO TEST ALCOHOL

New York, March 19—Utility, economic and other tests are to be promoted the coming season by the Automobile Club of America. George F. Chamberlin, chairman of a special committee on the subject, having made his report to the governors,

Most important and interesting of all the tests to be promoted will be that for trying out the cost and practicability of the use of alcohol as a motor fuel. In pursuance of this plan the club proposes to offer prizes of sufficient value and variety to induce manufacturers generally to enter the contests. It is claimed by the club that the tests held abroad of alcohol fuel efficiency have not been as extensive as could be desired, and so the club will lend its efforts to bringing about a competition in which cars in large number and variety shall compete.

Gasoline is now quoted wholesale at 14½ cents per gallon, and 12½ cents per gallon for deodorized stove gasoline. Buyers in small quantities pay in the neighborhood of 20 cents, which is a marked advance in former prices. The recent raising of the price ½ cent a gallon by the Standard Oil Co. gives an indication of what users are to expect in the future with the constant increase in demand from the growth of automobiling and the use of gas engines for farming and other

A bill is now before congress to remove the tax from grain alcohol used for industrial purposes, and although little public attention has been paid to it, the progress of the bill has been watched with care by motorists and farmers alike.

GASOLINE SQUEEZE ON

London, March 10—The gasoline squeeze is proceeding here. The public is now paying from 32 to 36 cents a gallon for gasoline and the retailer from 12 to 20 cents, according to his ability to squeeze his squeezers. The motor bus interest is beginning to kick, and one of the managers of a London bus company has stated that should gasoline rise to 16 cents a gallon it will become uncommercial for them and consequently they will have to look to other sources of fuel. England is likely to see a lot of trouble on this matter before the end of the season. But the oil kings have the game in their own hand and can do as they please.



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SHOWS WILL BE HELD

NOTWITHSTANDING the fact that the N. A. A. M. has issued its edict that next year it will refuse sanction for any but the New York and Chicago automobile shows, it is current talk that the cities which held exhibitions this year will promote shows next season, and in addition several other localities have come to the conclusion that shows are good things for the local trade and for the people who want to buy cars. There is every probability that the N. A. A. M. will, sooner or later, declare that when the now famous edict was sent forth it referred only to "national" shows and meant only to prevent members of the national organization from taking part in the shows. It will probably stipulate that it never meant to interfere with whatever the local agents desire to do in the matter of shows in their own cities. It will be a difficult matter for the N. A. A. M. to ascertain to what extent a maker helps an agent in some particular city in the matter of a local show. That help can come from the maker in a number of ways and still the maker will be violating no rule of the N. A. A. M. There is little prospect that only New York and Chicago will be the only cities favored by shows in 1907.

AMERICA'S EXPORT TRADE

THERE is little wonder that France and England are watching the American maker in general and the American export figures in particular, and that the newspapers of those countries are sounding notes of warning. The makers of automobiles in this country exported during the last 7 months of 1905 automobiles to the value of \$1,438,600, a gain of more than 10 per cent over the corresponding period of a year previous. These automobiles for export went to all parts of the globe—to Great Britain, France, Germany and the orient. They went into countries that heretofore have purchased European-made machines to a large extent, and they went into the very heart of the automobile industry abroad. The American-made automobile has shown itself so good that it has become a strong competitor right in the enemy's camp, and to compete with it some of the foreign mak-

ers have come to the conclusion that American methods of manufacture must be followed and old shop practices abandoned. The end of it is not yet, the prediction that the American-made automobile would force its way into all parts of the world against all comers not only is being fulfilled, but has been fulfilled. It is a repetition of the bicycle trade, as far as foreign competition is concerned. The American export business has already forced some of the French makers into producing cars of the runabout type, the American small car having proved well adapted to the needs of middle class people. England cannot hope to have a market in France; Frenchmen will, however, buy American cars.

AUTOMOBILE STUDENTS

THE AVERAGE automobile agent in the city is not so close a student of automobiling generally as is the country agent; he is not so well posted in mechanics and he is not so resourceful. Perhaps he is too busy to read as much as he desires, or perhaps he is not inclined that way. It is true he picks up more in the routine of business, but that is not sufficient to keep in front. There are many notable exceptions, and among these exceptions the most successful agents are found. Nor do all sales managers, publicity men, advertising agents and others, supposedly well posted, keep up to the times. Among the students will be found the valuable sales manager, advertising agent or publicity man. He makes it his business to digest all that is set before him; he is the man who knows the game from beginning to end. The successful trade man ought to know all that takes place in the world of automobiling, he ought to see beyond his own little sphere.

FEDERAL JURISDICTION

SUCH a scheme as Mr. Gorham proposes—to have the federal government assume control of automobile regulations—at least sounds good, and in all probability would be welcomed by a majority of the motorists of the country. The fact that European governments assume such control, however, has little bearing on the question. As a matter of fact, there is not the least chance that congress

will pass such a measure and still smaller chance that the United States supreme court will hold it valid if it is passed, inasmuch as it must be clear to anybody that it would conflict with the rights of the states as granted by the federal constitution. It will take a good many years to settle the question of the rights of the automobile and each state will have its own way of settling it. Eventually all states will have come to the same conclusion as to what is reasonable and what is necessary in this matter, and if efforts are directed toward securing the passage of similar measures in the various states it will be the quickest and best way out of the matter. It might be possible to secure the federal supreme court's ruling on the principle of an automobilist's rights, and with this as a basis the passage of similar bills in all states can be secured. This seems the best method of procedure in order to quickly and finally determine wherein the automobilist stands, as far as his rights are concerned. It will require the combined efforts of all motorists, however, to secure these results.

SIMPLICITY IN DESIGN

NOT EVERY automobile maker in Europe and the United States has sought simplicity in design in making cars; most makers have been getting away from simplicity in their desire to make good cars, notwithstanding the fact that the demand is for simplicity. It does not follow that a multiplicity of parts makes a successful automobile; in many cases there are too many parts—so many, in fact, that the chances for trouble are increased to an alarming extent. There is a more or less settled state in the matter of design today, so that henceforth one may reasonably expect designers to bend their efforts toward doing away with unnecessary parts and bringing their wares down to the simplest form consistent with economy of operation and successful running. The simple car is the car of the future—the one that will sell well, run well and last.

BAD TASTE, AT BEST

SOONER or later the maker and the dealer will come to the conclusion that it is unwise to encourage speed contests on the road—that is, the little stunts of which agents and makers are so proud as showing the worth or the ability of this or that car in the matter of speed and reliability of running for some considerable distance. Stories of such affairs look well in print, but each letter grades on the average citizen and particularly on the users of horses and the authorities. It is such doings that cause adverse criticism of the automobile and its users—the innocent as well as the guilty. It can be construed as nothing less than an unwise policy for a maker to encourage such contests or trials, for they are not made with the sanction of the authorities.



That little blizzard of the early part of the week was evidently the ground hog's trump card.

Boston's show may have been last on the list, but it was a long way from last in size and quality.

The size of the new A. A. A. racing board indicates that a whole lot of diplomacy has been displayed by somebody.

When some dealers prayed for a little bad weather in order to keep purchasers from howling for deliveries, they probably didn't expect to have their prayers answered with such vengeance.

Mr. Gorham's idea of federal regulation of automobiles sounds good, but that old bone of contention, state rights, would crop up suddenly and put a most effectual quietus upon any such scheme.

The new racing board is composed of so many members that Mr. Thompson will find himself like a hen with a family of ducklings. Still, there'll be about three members to do the work and the rest to look wise.

While some motorists—particularly those in New Jersey—would like to have Uncle Sam take a hand in "regulating" automobiles, the motor boat people have for years been trying to have the dear old gentleman keep his hands off of their game. He threatened several times to do a little regulating in this direction, but each time has been coaxed away.



THE GROUND HOG PLAYS A TRUMP



British Society of Motor Manufacturers definitely decides to split Olympia show into two sections—the pleasure vehicles affair November 15 to 24, 1906, and commercial cars in April, 1907.

Automobilists in Honolulu celebrate Washington's birthday by holding elaborate floral parade in which American-made cars carry off the honors.

New York dealers propose to go ahead with their open air show despite action of N. A. A. M.; dates changed to May 24, 25 and 26.

Senator Morgan proposes pleasure jaunt over last year's Glidden tour route, to precede that event.

M. Darracq offers to meet S. F. Edge's 3-year guaranty if other French makers will do same.

Percy Megargel changes return route because of condition of wagon roads along Santa Fe railroad.

Chairman Thompson announces makeup of American Automobile Association racing board. Boston winds up show circuit, its affair proving one of biggest successes of the year.

House of representatives continues its probe into tax on denaturalized alcohol.

Darracq people organize company to build cars in Italy.

Frelinghuysen bill passes New Jersey senate.



The color line evidently is not drawn very closely in Hawaii, if the pictures of the recent flower parade held there can be believed.

Whatever may be the outcome of Edge's 3-year guaranty, it has stirred up the British and continental makers as nothing else ever did.

If the western railroads need employees to keep awake 72 hours in order to prevent accidents, it is suggested that some of the automobile newspaper men be taken on.

If Chairman Thompson, of the A. A. A. racing board, doesn't receive the support of automobilists in general, he will at least have the sympathy of a large share of them. Perhaps that will help some.

Here's the way they do it in Italy: "Societa Anonima per il Commercio e l'Industria di Automobili Velocipedi e pezzi di ricambio Fabbre & Gagliardi." Guess that will hold somebody for a while.

Jersey is great on bills—those regulating automobiles and those on mosquitoes.

What's the use of removing the tax on alcohol as long as John D. Rockefeller owns the earth?

The A. M. L. ought to devise some scheme to offset the advertising the A. A. A. has received of late.

There will be ample time to hold an endurance contest from New York to Chicago before the New-York-Chicago highway is completed.

If Toronto is really to have an automobile show, it would better wait until about July 1, judging by the weather on this side of the border.

Judging by the local shows that have sprung up, one might imagine every place in the union proposes having one whack at the exhibition business before the N. A. A. M. mandate goes into effect.

Considering the time taken by Megargel and Fassett to pass through New Mexico, possibly the Reo travelers have become lost and are traveling in a circle, the way a man does when he is lost in some forest.

Sometimes it is a hard matter to take a joke, particularly when the joke happens to fly up and hit you. The poor, decrepit nag that happened along the highway and saw one of Ike Potter's signboards with a big 23 couldn't see any joke in it. The joke was there, however, even if Ike Potter didn't mean it.



THE SIGN OF THE TIMES

CARD FOR BEACH MEET

**Eighteen Races Will Be Run at
Atlantic City April 26, 27,
28—Novelties Planned**

New York, March 19—For the opening automobile meet of the eastern year to be held at the Atlantic City beach, April 26, 27 and 28, the club announces a program of events which offers an opportunity for every type of automobile to show its worth in competition. During the 3 days' tournament, there will be eighteen races over the smooth, hard beach with record trials for cars of all weights. Besides the speed events there will be a ¼-mile race on the reverse gear, a tug of war and match races. There will be races for gasoline cars of various weights and for steamers; a race for touring cars of 40 horsepower or less for the amateurs, and four touring car contests under price classification from \$4,000 to \$1,500. There will be a price handicap for four-cylinder touring cars and another one for two-cylinder cars. In addition there is scheduled a handicap for cars that travel the beach at better than a mile a minute, a race for air-cooled cars and one for machines of six cylinders.

Following is the complete program of events, all speed contests being at one mile:

Record trials, steam.
Record trials, gasoline cars, 1,432 to 2,204 pounds.

Record trials, gasoline cars, 881 to 1,432 pounds.

Record trials, gasoline cars, 551 to 881 pounds.

Free-for-all, flying start, championship.

All gasoline cars, standing start, championship.

Heavyweight gasoline, 1,432 to 2,204 pounds, championship.

Middleweight cars, four cylinders, championship.

Touring cars, 40-horsepower or less, regular equipment, amateurs to drive. To carry five passengers.

Air-cooled touring cars—Regular equipment. To carry five passengers.

Price handicap, for four-cylinder touring cars, regular equipment, to carry five passengers, \$4,000 car on scratch; handicap of 1 second for each \$100 less in price.

Price handicap for two-cylinder touring cars, regular equipment. Carry five passengers. \$1,500 car on scratch; handicap of 2 seconds for each \$100 less in price.

For six-cylinder touring cars, regular equipment. Carry five passengers.

Handicap 1 minute class, for cars that establish marks better than 1 minute on the beach.

Touring cars, gasoline, selling at \$3,500 or less. Regular equipment. Carry five passengers.

Touring cars, gasoline, selling at \$2,500 or less. Regular equipment. Carry five passengers.

Touring cars, gasoline, selling at \$1,500 or less. Regular equipment. Carry five passengers.

Runabouts, gasoline, selling at \$1,000 or less. Regular equipment. Carry two passengers.

One-fourth mile touring cars, open to all, on reverse gear—regular equipment. Carry five passengers.

Tug of war, match races and special events to be arranged.

Regular equipment requires cars to be equipped as per makers' catalogue specifications, except that lamps, baskets, tops,

mud guards and mufflers need not be carried. Where passengers are carried, they must not weigh less than 140 pounds each if men, and 120 pounds each if women.

To out-Ormond Ormond is the intention of the Atlantic City Automobile Club. There is a probability that some records will go, for the Ventner course is never better than during mid-spring. The club's racing committee, just appointed, consists of H. B. Cook, Albert T. Bell, L. H. Hooper, Isaac Bacharach, Jr., A. Manz, W. H. Hinchman and Albert Darnell, and these, with the entertainment committee—John J. White, H. P. Mulock, F. A. Broadhead and Thomas B. Nuttall—promise to carry the affair through to a successful end if the weather clerk does his part.

The A. A. A. has been called upon to furnish the referee, judges and timers, and the following have been named: Al Reeves, A. G. Batchelder, Robert Lee Morrell, A. L. McMurtry, S. M. Butler and F. J. Wagner, all being men of experience.

KICK OVER TOUR ROUTE

Paris, March 5—Scarcely has the European tourist circuit been decided upon when it is being discovered on all sides that the stages are too long and that many of the smaller-powered cars will be able only with difficulty to accomplish some of the more mountainous stages. For instance, Paris to Limoges 250 miles, Grenoble to Milan 240 miles, Hanover to Cologne 235 miles, Cologne to Reims 240 miles, are all very long stages for a day's run. When it is considered that the 8 and 12-horsepower tourist cars are expected to make 19 miles per hour on the average, it will be seen that the stages will be practically impossible for some of the entrants. Another thing is that some of the stages are exceedingly mountainous, and added to this is the rule that the controlling points are closed at 4 a. m. This time is calculated as follows: The control is shut for each class at an hour corresponding to the theoretical time of arrival of the car last sent off, running at a speed equal to half the maximum speed allowed for this class. Thus, if the class is supposed to run at 19 miles per hour, the control remains open for each car on the supposition of a speed of 10 miles per hour, the latest delay being 4 a. m. every morning. On this calculation, the run from Paris to Limoges represents a running time of 26 hours at 10 miles per hour.

BILL PASSES SENATE

Trenton, March 15—The senate last night passed the Frelinghuysen bill by a vote of 17 to 2 without the elimination of any of its obnoxious features. The fate of the bill in the house is problematical at this time. There is considerable opposition to it among the farmers and economists, because it creates an automobile department, with a commissioner and a chief inspector at \$1,500 a year each, with not more than twenty subordinate inspectors to be paid as the commission directs.

LAST SHOW OF SEASON

**Boston Winds Up Circuit After
Successful Week's Run—Big
Attendance Reported**

Boston, March 19—The automobile show, which closed on Saturday night with a grand march by the exhibitors and salesmen and the tuneful rendering of "Gasoline" by the united company, and the "Star Spangled Banner" by Mr. Kenyon, was unquestionably the best local affair of the year. The tremendous increase in interest in matters automobilica is perhaps best shown by the fact that this year there were 317 cars shown, as against 192 a year ago. In the line of gasoline cars there were shown fifty-five chassis, 122 touring cars, forty-nine runabouts, twenty-three limousines, nine commercial vehicles, two racing machines and eleven motor cycles, a total of 271 gasoline vehicles, a total gain of 100 over the number of a year ago. The total number of electrics displayed was twenty-three, as against nine of a year ago, making the electric class the second biggest branch of the show. Of this number there was one touring car, twelve runabouts, five limousines and seven commercial cars. Singular though it may seem, there were twenty steam vehicles shown in both years, and that, too, despite the fact there was one more exhibitor of steam than a year ago. The steamers were divided as follows: Eight touring cars, six runabouts, five limousines and one chassis. In the boat department the same steady gain was shown, there being no less than eighty-five boats of all descriptions shown, as against sixty-seven a year ago.

Truly, Boston can stand comparison with all others held this year. As a matter of interest the comparison of attendance is shown. Considering the first 4 days of the shows—Saturday, Monday, Tuesday and Wednesday—the admissions were, in 1904, a total of 9,900; in 1905, a total of 102,000; whereas this year the total was 114,000. Comparing the attendance by individual days the figures for this year and last year respectively, were, for Saturday, 52,000 and 47,000; for Monday, 18,000 and 14,000; for Tuesday, 21,000 and 18,000; for Wednesday, 23,000 and 23,000. Wednesday in each case was the first day for large excursions from northern New England. The attendance this year on Thursday was cut down very noticeably by the blizzard, for only 9,000 admissions were recorded on that day. The total for Saturday was 23,000. These figures make it apparent that the grand total for this year's show previous to the closing day has been about 146,000.

A nice, quiet, respectable little game of hill-climbing in which the cheering multitude, and the multitude itself, as well as the brazen, discordant notes of the automobile horns, were entirely absent, was played on Parker hill Sunday morning.

Originally it was intended to have been a two-cornered affair, but before the morning had expired there came two other Richmonds in the field, who showed to the enthusiasts present just what their cars could do in ascending the steep, winding, snow-clad hill. The original contest was between W. C. Kelsey with a four-cylinder 35-40-horsepower Maxwell, and John Lee, with a four-cylinder 35-40-horsepower Jackson, the match being the result of a little enthusiastic conversation during the recent motor show. Kelsey and the Maxwell won in two straight heats, his times being 1 minute 30 1/2 seconds and 1 minute 39 1/2 seconds, respectively; while Lee's time for his first trial was 1 minute 38 1/2 seconds. The second time was not taken, as he failed to finish, owing to his stalling his engine by endeavoring to carry too high a gear at the worst part of the hill. This gave Kelsey the contest, as it was to have been the best two out of three heats.

The second trial of speed and ability was between E. A. G. Gilmore's 35-40-horsepower four-cylinder Rambler and A. R. Bangs' four-cylinder 20-horsepower Franklin, and was the result of an argument developed during the early trials. Three heats were necessary to determine this contest, and the honors went to the Rambler with the best time of the day, 1 minute 26 1/2 seconds, while Bangs' best time was 1 minute 28 seconds. After these cars had done the trick, several went up for private trials, one of them being the Maxwell Speedster, which carried up five men, and that, too, without the use of chains on its rear wheels.

A. C. A. CORNER STONE LAYING

New York, March 21—Special telegram—The corner stone of the club house of the Automobile Club of America was laid with appropriate ceremonies today. President Morris outlined the club's history and declared the new building would be not only a temple of sport but a monument of the progress of civilization. Former President Shattuck delivered a prophecy declaring the traffic of the world will be carried by automobiles on broad, dustless highways; that railroads will fall into disuse and the automobile will disappear in its turn, to be replaced by the flying machine. A history of the club, emblems, coin, newspapers, maps, automobile laws, Shattuck's prophecy, and other things were placed in the box. Rev. Milton Merle Smith offered the dedicatory prayer.

BUY INTO GARFORD CO.

South Bend, Ind., March 17—It was announced here yesterday that the Studebakers have bought into the Garford Co., of Cleveland and Elyria, to the extent of a quarter million dollars. The deal will not cause any change in the Garford company, which will continue under the same name. It has been turning out parts for the Studebakers ever since they have been in the automobile-making business.

HE NAMES FULL BOARD

Chairman Thompson of A. A. A. Racing Commission Selects Associates—One Added

New York, March 20—Chairman J. De Mont Thompson this afternoon announced the personnel of the 1906 racing board of the American Automobile Association after it had been returned to him from Chicago with the O. K. of President Farson. He has added one man to the list, making fourteen on the board. Robert Lee Morrell, the ex-chairman, is not on the list despite the rumor that was current a few days ago that Morrell, while refusing to again serve as chairman, would not be averse to holding down a place on the board. William Wallace, F. C. Donald, James L. Breese, T. M. Hilliard and George Isham Scott are not on the list, the new members being Messrs. Batchelder, Taylor, Webb, Cobe, Bergtold and Lowe.

As announced by the chairman the makeup of the board is as follows: Jefferson De Mont Thompson, chairman; William K. Vanderbilt, Jr., E. Russell Thomas, Samuel Walter Taylor, A. G. Batchelder, S. M. Butler, H. L. Bowden, Boston; R. Lincoln Lippitt, Providence; Frank G. Webb, New York; Ira M. Cobe, Chicago; George L. Weiss, Cleveland; E. H. R. Green, Dallas, Texas; Dr. W. H. Bergtold, Denver; L. P. Lowe, San Francisco.

Technical advisers to the board: Peter Cooper Hewitt, of New York; E. R. Thomas, of Buffalo; A. L. Riker, of Bridgeport, Conn., and Henry Ford, of Detroit.

It will be noted that a change has also been made in the technical end of the board, A. L. Riker being the only hold-over. This branch has also been increased by the addition of an extra member.

It will be some time before Chairman Gorham will have his law committee ready. It is going to take time to complete this, for the legal department will be much larger than last year. Chairman Gorham desires to secure the services of at least one brilliant lawyer from each of the big clubs, so the A. A. A. will be well equipped when it goes to court.

Chairman Deming, of the touring committee, will be in Chicago Thursday for the purpose of conferring with President Farson regarding the makeup of the committee of which he is the head.

As much interest is being manifested by New Yorkers in the competition of the new A. A. A. touring committee as in the make-up of the incoming racing board. The enthusiasm for the Glidden tour is great and general. New Yorkers naturally would like the starting point to be from this city, but the reasonable ones among them acknowledge the fairness of the west being recognized this year. New Englanders do not want to be cut out of the route and have a yearning to visit the White mountains again.

A suggestion has been made here that Chicago, Boston and New York be the three terminal starting points. The idea under this plan would be to make Detroit the assembling point. New Yorkers and New Englanders would meet at Albany and go to Buffalo via Utica, Syracuse and Rochester, cross to Canada and proceed to Toronto. Clevelanders would meet the Chicagoans and Wolverines at Detroit, then crossing to Canada, proceed in a body via London, Woodstock and Hamilton to Toronto, where they would join the Easterners and drive together to Kingston and Montreal.

An objection to various concentrating tours would seem to be that the distances and difficulties would be different and few cars would compete under the same conditions, a necessary thing in a contest for a single trophy. The outcome of it all will probably and unavoidably be that the easterners will have to give the start and route to the westerners or stay out.

WILL SHOW ANYWAY

New York, March 19—The committee in charge of the proposed open-air show of the New York Automobile Trade Association has decided to go ahead with the holding of it. The dates chosen have been changed to Thursday, Friday and Saturday, May 24, 25 and 26. An understanding has been reached with James Butler whereby the Empire City track will be available. The committee will send out to the members this week letters setting forth the plans of the exhibition. The flurry over the action of the N. A. A. M. in pronouncing against local shows has subsided. The New York dealers appear to have been more scared than hurt. It now transpires that the makers have no objection to local shows in themselves, but object to being compelled to go to the expense of participating in them and contributing to them. It is now said that local branches will be allowed to take part in them, but will have the expense charged against them. The dealers are confident that they will get, if not an actual dividend, at least a rebate that will cut down the expense to a minimum.

FRENCH INVADE ITALY

Paris, March 6—The Société Anonyme des Automobiles Darracq Italiennes, is the name of the new Italian Darracq company with a capital of \$1,000,000, with head offices at Rome. The works will be at Naples and orders are accepted for delivery early in 1907. Apparently all the larger French firms have decided to start works in Italy. Those now decided on the step and with works in hand include the Clément and Richard-Brasier at Turin, where the Peugeot Co. will start works shortly. The Darracq people are commencing at Naples and the Serralunga at Milan. It has long been recognized that Italy is a coming stronghold for the industry.

AIR FAME FOR WOMAN

Mrs. Griffith Brewer First One of Her Sex to Cross English Channel in a Balloon

London, March 10—Mrs. Griffith Brewer has achieved fame as being the first woman to ever make a balloon trip over the channel, she being one of a party of three to take part in the adventure. With her were Frank Hedges Butler, founder of the Aero Club, and Percival Spencer. The trip is described by Mr. Butler, as follows:

"The weathercock on the top of St. James' palace and the forecast of a north-west wind coming up on the tape meant, in the aeronautical world, a rarely favorable chance of getting across the channel. On telephoning to Messrs. Spencer, the balloon was immediately dispatched by cart to the Wandsworth and Putney gas works. Our party consisted of Mrs. Griffith Brewer, wife of a member of the Aero Club, Percival Spencer, and myself. At 2:15 the balloon was inflated and we got into the car. The wind was blowing about 35 miles an hour, and thirty strong men hung on to the rope. The order was given to 'Let go!' and 'All hands off!' Immediately the fine aerostat, of 45,000 cubic feet—which had previously taken the writer and Percival Spencer across the widest part of the channel on August 30 last year, on the occasion of the eclipse of the sun, and landed at Caen, in Normandy—rose like a bird in the air. The balloon took a splendid course, going straight between the two towers of the Crystal palace and down the Broad Walk, which appeared to direct us to Boulogne. The river Medway and Maidstone were next sighted, and very soon the English coast line. Going straight over the New Romney and Littlestone golf links, we were soon above the sea, and took some interesting photographs of Dungeness and the ships sailing below.

"Bowling across, the view from the balloon made the channel resemble a canal, as when in the middle of it we could clearly see the French and English coasts. As the balloon seemed perfectly happy in an equilibrium, a meal was got out, consisting of fowl, cake and some dry champagne. We drank the health of Father Neptune aloft while hearing the murmuring of the waves below. Now commenced a real excitement. We sighted the 2:20 p. m. turbine steamer Onward in mid-channel, and a grand race ensued. Curiously enough, we left London about the same time as the afternoon mail, and arrived at Boulogne about 5 minutes ahead. At 7,000 feet high snow began to fall and the thermometer was below freezing point; all the ballast froze as hard as stone, owing to the sand being wet before starting. Fishing boats, lighthouses, and other points were made out, and at last came

the breakers and a sight of the French coast. Pulling the valve, we began to descend gradually, and bounding through some poplar trees, and afterwards through a high fence with low trees, the balloon came to its well-earned anchorage about 20 miles from Boulogne, having carried across the channel the first woman who, in the history of ballooning, has ever been across. Getting a camion, we drove to the railway station, Samer, about 4 miles off, and caught the night mail from Calais, arriving back in London at 5:30 this morning."

CHANCE TO BEAT SIMMS BILL

Washington, D. C., March 19—At a recent meeting of the senate committee on the District of Columbia Senator Gallinger, the chairman, announced he would grant a hearing to the automobilists of Washington, D. C., on the Sims automobile bill recently passed by the house of representatives. The hearing will be held on March 30 and is expected to bring out many facts and figures about the use of automobiles in the capital. Immediately after the passage of the bill by the house the Cook & Stoddard Co., local agents for the Locomobile, White, Cadillac, Franklin and Baker, petitioned the senate for a hearing on the bill, and the company put forth such a strong argument against the bill that it was decided at once to give the automobilists a further chance to fight the measure. Mr. Stoddard invited Senators Gallinger and Allison to ride about the city in a car and they accepted. They were out in the car for more than 2 hours and during that time Mr. Stoddard showed them very conclusively that many features of the Sims bill were wrong. The senators came back to the capitol with more respect for the automobile. Stoddard put the car through a lot of funny stunts and the ease with which the car could be controlled amazed the august legislators.

AFTER FAKE SCHOOLS

New York, March 19—The fake automobile school abuse has become so much in evidence that the New York Trade Association is about to start a crusade against it. These fake schools made a bluff at having an engine, transmission or other part set up, about which they talk wisely. At the end of a week or two of so-called instruction they send out an utterly incompetent man armed with a diploma to prey on the public. Some of them advertise and circularize to a considerable extent, get the money out of pupils and turn them out with a certificate and an assurance that they know the whole thing. Some of their victims are beginning to seek redress in the courts. Legitimate schools in successful operation are the Y. M. C. A. classes and the New York School of Automobile Engineering. Leading branch managers and agents are interested in the latter, which also has the indorsement of the A. L. A. M.

AS VIEWED BY AGENTS

New Napier Policy With 3-Year Guaranty Brings Out British Middleman's Position

London, March 10—The new policy of the Napier company in proposing a 3 years' guaranty to its customers has brought to the front the position of the agent in these matters. On the continent there are no retail agents, at least not in the same way as we have them in this country. Any man who goes to a French manufacturer can practically get the same terms as any established agent of that firm so long as he orders the same quantity. Here, however, business is conducted very differently, and the trade status of the customer is considered in these deals.

Most of our leading houses have the kingdom mapped out into districts, inside which the direct sales as between the manufacturer and the public carry their proportion of profit for the agent in whose district the customer is located, it being held that, in all probability, the sale has been an indirect result of the agents' efforts. Under these circumstances the 3 years' guaranty of the Napier company assumes a rather heavy form of tax on the agent inasmuch as the sale once affected is not done with for 3 years. To the agent from whom the car was actually purchased the customer returns with every complaint and to obtain satisfaction under his guaranty, consequently, when a Napier agent sells a car he will have to look forward to 3 years' further negotiation between the manufacturer and the customer and generally act an arbitrator between the two, for all of which, once the sale is effected, he will obtain no further profit.

It is not known what particular terms the Napier company is offering its agents, but it is pertinent to point out that prices, as they now stand, will not continue indefinitely, while the policy of giving a 3 years' guaranty, once entered upon, cannot be curtailed or revoked without affecting the public confidence in the goods supplied, any curtailment suggesting a corresponding reduction in reliability. When prices fall to the level which are apprehended in a year or so, it will not pay an agent to handle a car under a 3-year guaranty. This phase of the matter is certainly to be productive of a good deal of criticism during the next few months.

QUAKER VIEW OF A. A. A.

Philadelphia, March 19—Now that the die has been cast, the members of the Automobile Club of Philadelphia, which last week severed its connection with the American Automobile Association, have been wondering why they have hung on so long. Said one of the club's officials to the MOTOR AGE representative on Saturday last: "We have never benefited one iota

from our membership in the A. A. A. It is a national organization in name only. It has always been in, of and for New York—especially 'for'—and the rest of the country has been supplying much of the sinews of war in the shape of the annual dues. Almost all our legal fights—and we have had not a few of them—have been won through our own efforts. Is it any wonder that we have decided that the money we formerly spent in New York—possibly for oiling the Long Island racing course—might just as profitably be spent right here in our own state? This is no 'rebellion,' as some of the dailies and technical journals have characterized it, but a plain business move, justified by the conditions and made only after a thorough discussion and a long trial of the A. A. A., which, so far as concerns any benefits to us and to the trade in general, has been found wanting."

At the next meeting of the Pennsylvania Motor Federation, the report of the recruiting committee, which is now actively at work, will show not only the en bloc additions of the clubs at Scranton, Wilkes-Barre, Erie, Lancaster, West Chester, Pottsville and other places, but hundreds of individual applications from the great body of unattached automobilists throughout the state.

TALK GLIDDEN TOUR

Boston, March 19—The most talked-of topic during the automobile show was the coming Glidden tour. It was surprising to notice the unanimity of ideas on this one matter—one of opposition if the proposed rules are retained. The manufacturers and dealers in the main are opposed to the conditions as they existed a year ago. It was whispered during the show that the touring committee of the N. A. A. M., which has been and is now considering the question in all its details, will report adversely on the scheme and that it will recommend that the machines be divided into classes according to their horsepower and price, and that touring cars selling for less than \$1,000 should not receive the same rating and standing as they did last year. There will probably be a recommendation that each car carry an official observer, and that the Canadian portion of the trip be entirely abandoned.

HELDS AUSTRIAN PROTEST

Paris, March 5—It will be remembered that the International motor cycle cup was won last year by Austria, which of course means that the race will be run this year in Austrian territory. The Austrian club recently protested courteously to the French club regarding the new cup which was offered this year for international contest by the French club in view of the closeness of dates on which the two events will be held. The French club has acknowledged the justice of the protest and the new cup will be competed for as a national event instead of international, as at first proposed by the French club.

NEW IDEA BY MORGAN

Senator Proposes Pleasure Trip Over Old Glidden Tour Route to Precede That Event

New York, March 20—The likelihood being little that New York, Boston or the White mountains will be included in the Glidden tour the versatile Senator Morgan has conceived the idea of a purely pleasure tour, embracing the sections named, which shall in no way interfere with the annual A. A. A. touring competition. He has already approached the Bay State Automobile Association to look after the New England end and has been promised support by President Louis R. Speare. It is possible that he may get the Long Island Automobile Club to father the scheme at this end, but at least he looks for its indorsement by the Boston club and perhaps by the Automobile Club of America also.

The tour will be one entirely for pleasure and without competitive restrictions and will be set for early in July, so as to interfere as little as possible with the Glidden contest, if at all. It will embrace the Berkshires, the White mountains, Maine and the Massachusetts coast and include among its features the annual climb to the clouds, races on Old Orchard beach and a monster clam bake at Portland, Me.

The following schedule has been tentatively laid out:

First day—Waterbury, Conn., 89 miles.

Second day—Lenox, Mass., 90 miles, the Boston and New York divisions to meet here.

Third day—Lowell, 140 miles.

Fourth day—Profile, 131 miles.

Fifth day—Bethlehem, 24 miles. Here there will be a climb up Profile mountain or Mount Agassiz, as planned.

Fifth day—Bretton Woods, 24 miles.

Sixth day—Run to Crawford Notch for a hill-climb.

Seventh day—Rest and short runs.

Eighth day—Dixville Notch, 70 miles, where each carload will catch its own trout.

Ninth day—Return to Bretton Woods, via Errol and Berlin, 76 miles.

Tenth day—Poland Springs, Me., 84 miles, with lunch at Intervale.

Eleventh day—Portland, Me., 28 miles, via Old Orchard beach, where informal races on the beach are planned.

Twelfth day—Boston, 110 miles.

There will be no real climb to the clouds. Experience has shown it to be too perilous. Instead, there will be climbs up Crawford Notch and either Mount Agassiz or Profile. Entrants will have their choice whether to enter in the Crawford Notch or the other climb.

With a start on July 2 the tour will end in Boston 3 days before July 16, the present date set for the start of the Glidden tour.

With this event Morgan expects that the disgruntled ones who have been rais-

ing all this holler over the selection of the 1906 course, which will cut out this section of the country, will be pacified. It will also allow those who do not care for the competition end of the game to participate in an affair over their favorite roads which will be semi-official in nature. The idea is a new one with Morgan and he has just sprung it on the public. Those who have heard of it are well pleased with the prospect and Morgan is in receipt of many promises of support, not only from the pleasure-seekers themselves, but trade people, whose support is always needed to make these affairs a success.

FREIGHT RATES REDUCED

New York, March 19—Reduced freight rates on tourists' automobiles west of Chicago has just been granted by the western railroad companies after some extensive negotiations by the traffic department of the Association of Licensed Automobile Manufacturers. The reduction amounts practically to about one rate and a half on the travel from Chicago to San Francisco and return. This, of course, will benefit all those going from New York, or any point east of Chicago, to the Pacific coast and back again, although the greatest financial advantage will be on the round trip between Chicago and San Francisco. To illustrate, the present rate on the automobiles of tourists from New York to San Francisco and from Chicago to 'Frisco is the same, that is, \$150. The east-bound rate is higher than the west-bound one. From 'Frisco to Chicago it is \$170, while it is only \$185 for a car from 'Frisco to New York. Under the new deal, any tourist who has paid the full tariff going west from Chicago to the Golden Gate, may, upon returning, get the half-rate of \$95 from the coast to Chicago. Of course, a traveler from New York, or any other point east of Chicago, would get some advantage from this arrangement by paying the half-rate back to Chicago, although he then would be obliged to pay the full rate from there east. In this way, a man going from Detroit to 'Frisco and back, for instance, will pay only \$114.66, instead of \$172.50.

NEW LAW FOR CHICAGO

Chicago, March 21—Chief of Police Collins, after a consultation with prominent local motorists, has prepared his road rules, which will be incorporated in the automobile ordinance which is expected to come up before the city council Monday night. He has decided that all vehicles will be required to carry lights at night and that this clause will be enforced. He will also compel cars stopping by the roadside to pull up with the right side to the curb; that a motorist must go past the center of a street intersection before turning; that when passing another vehicle he must turn to the left instead of cutting to the right, and that slow vehicles must keep to the right and near the curb.

Automobile Development

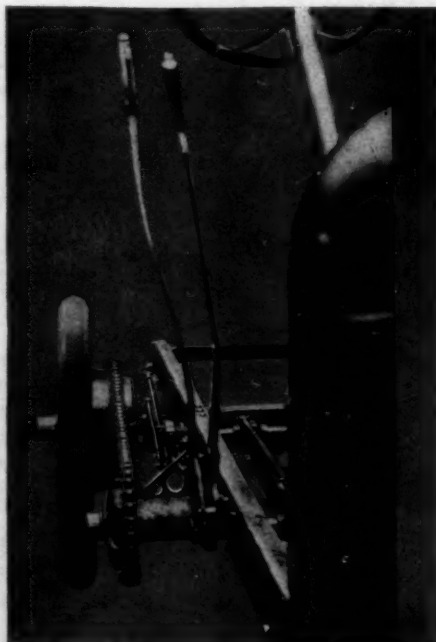
BERKSHIRE cars, products of the Berkshire Automobile Co., Pittsfield, Mass., differ in many details from the machines made a year ago. The tendencies shown by these changes are not all in keeping with the general trend of automobile advancement. Some of them are distinct novelties, the value of which has, to a large extent, yet to be determined. Undoubtedly the greatest novelty is the sliding shaft transmission in which the gears arranged on a main and countershaft, as in the ordinary gearset, are constantly in mesh, but never are moved. The main-shaft key slides endwise so as to lock the required gear with the shaft. The Berkshire motor is not made in the company's plant, coming from a New York engine builder. It is of the individual cylinder style. Hess-Bright ball-bearings are used in only a couple of places on the jackshaft. Timken rollers are retained in the road wheels. In the motor and gearbox bronze and babbitt are generally used. Side chain drive, pressed steel framework, jump spark ignition, half-elliptic springs and standard water-cooling system remain much the same. Berkshire cars are in three models—A, B and C. The first, the smallest of the trio, is a 20-horsepower, four-cylinder machine with cylinders measuring 4 and 4½ inches bore and stroke, respectively, with transmission through a cone clutch, three-speed and reverse gearset and double side chains to large sprockets on the rear wheels.

Other distinguishing features are: 98-inch wheelbase, 30 by 3½-inch tires, weight 1,800 pounds and accommodation for four passengers. In model B the motor, with bore and stroke of 4¼ and 5½ inches, is rated at 30-35 horsepower. The transmission and jump spark ignition schemes are identical in design with that in A. Points of difference are: 115-inch wheelbase, 34 by 4-inch tires and weight 2,450 pounds. Accommodation for five passengers is provided. In model C the motor carries six separately-cast cylinders and has a manganese bronze crankcase in place of the aluminum cases in use on the other two models. The transmission system is the same, but the wheelbase measures 122 inches. The tires are 34 by 5

inches. The car weighs 3,200 pounds and has regular seating for five adults. Bodies used on all machines have wide side entrances, running boards with continuous fenders and hollow metal dashes. Body work is of laminated wood construction and upholstery is in full leather. Recognized body lines rule throughout and the finish is in Acme green.

A glance at the motors shows that all have separately-cast cylinders with the valve ports disposed on opposite sides—intakes on the right, exhausts on the left. The cylinders, waterjackets and valve housings are in one casting. Within, the cylinders are subjected to a grinding finish. In obtaining a good piston fit a special grinding or finishing machine is used. In this process the piston with its rings is reciprocated within the cylinder and at the same time the piston is given a rotating movement, the object being a perfect cylindrical fit throughout. A fine grinding powder is made use of in this process which gives both cylinder rings and the inside of the cylinder walls a polished finish. The crankcase is conventional in that it has the five bearings of the crankshaft supported in

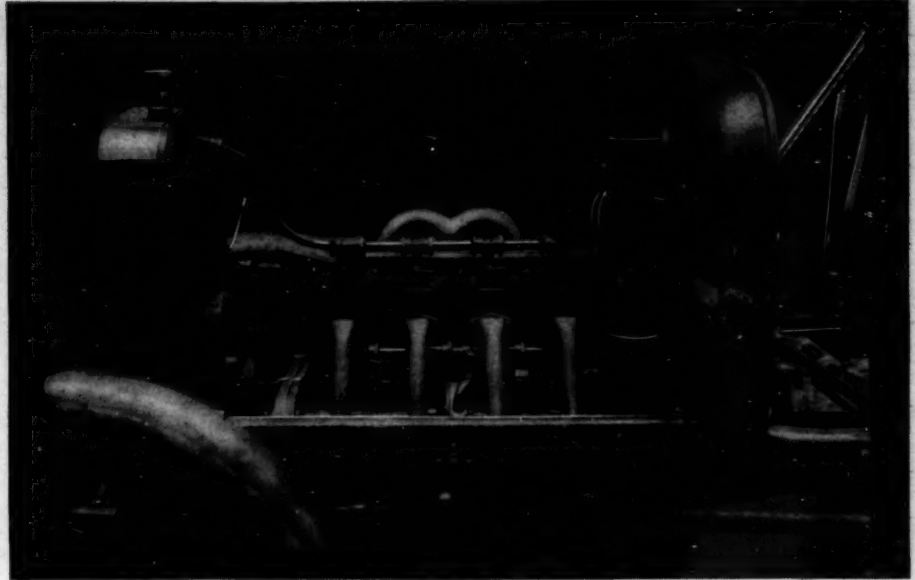
the upper half but enters the realm of simplicity by having webbed supporting arms for carrying it on the car subframe the webs eliminating the necessity of a dust or mud apron being carried beneath the car machinery. Ample bearing surfaces are provided for the nickel steel, hand-forged crankshaft, by making the end bearings 4 inches long and the three intermediate bearings of a corresponding length. Plain bronze is the supporting metal in these bearings as well as in the five bearings used for each of the camshafts. A cast iron flywheel 15 inches in diameter is bolted to an integral flange on the crankshaft. The crankshaft diameter is 1½ inches and the crankpins are of the same diameter. All four connecting rods are formed from nickel steel in I-section and have the connecting rod caps at the crankshaft end secured by studs and a double set of lock nuts, whereas the bearing at the piston end is of the non-adjustable type. In the smallest model, the 20-horsepower car, the three compression rings in the pistons are carried well above the wrist pin, with a broad oil groove beneath the pin, but in the two larger cars, models B and C, there are four rings above the wristpin and one beneath. Wristpins are hollow hardened steel pieces, 1½-inch diameter in the small car and 1¼-inch in the larger models. They are held to the piston bosses by set screws. The piston rings are of the lap joint variety, ground on three sides and pinned against rotation. Nickel steel, so common in many of the motor parts, is used in both the intake and exhaust valves, which, by the way, are made interchangeable and have the heads and stems forged integrally. In removing either set brass screw caps are taken out of the tops of the ports, and these caps, in the intakes, carry the spark plugs. Those above the exhaust valves have compression relief caps. The lift rods from the camshafts are hardened steel pieces working in bronze guides in the top of the crankcase. These rods, contrary to general practice, do not carry rollers for bearing upon the cams but have on their lower ends circular disks, rounded somewhat on their under surface. Cams are separate hard-



BERKSHIRE JACKSHAFT BEARING

ened members secured to the shafts by taper pins riveted all over. The camshafts are nickel steel rods, 1 inch in diameter. They are removable by pulling out endwise through the front bearings, a lock sufficing to retain the shaft in position in the car. Valve springs are typical. Half-time gears on the front end of the motor are enclosed in an aluminum housing; the intake pipe from the Holley carburetor to the valve ports is a peculiarly T-shaped aluminum casting with the throttle valve in the center of the vertical part and the crossarms curved upward in semi-circular fashion, much resembling the style used on several foreign cars; the exhaust pipe casting is made in one piece, the arms from the several cylinders passing directly down to the side of the crankcase where they unite at an acute angle with the main pipe to the muffler. The water piping from the radiator to the sides of the cylinders is made of brass. Copper is used in the return flow pipe from the cylinder heads to the top of the radiator. A Briscoe cellular type radiator forms the front of the bonnet; in the rear of it is an aluminum fan running on ball-bearings and supported by a bronze bracket from the front cylinder. Circulation is maintained by a bronze centrifugal pump located near the center of the motor at the left on a separate shaft and driven by a spur gear off the camshaft.

In the ignition outlay a LaCoste ball contact timer is carried on the top of a vertical shaft at the rear of the motor and directly in front of the dash. This vertical shaft is continued below the camshaft from which it is driven by bevel gears. It carries on its lower end a rotary oil pump used in the lubrication system of the motor. Other features in the ignition system are a four-vibrator coil on the dash, storage cells, with dry cells in reserve and a three-way switch. A support for the wires to the spark plugs takes the form of a large diameter fiber tube, carried on the sides of the cylinders. Looking more



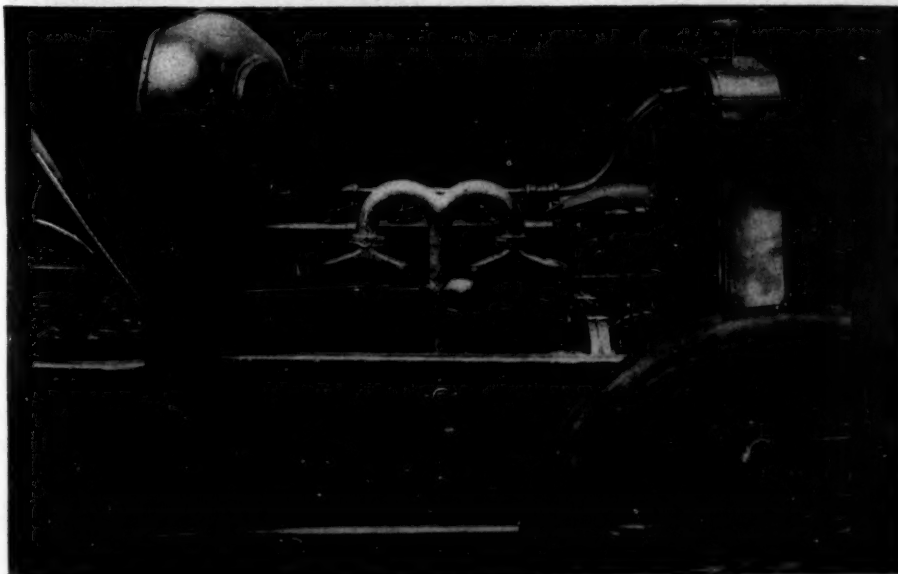
LEFT SIDE OF THE BERKSHIRE MOTOR

closely at the oiling scheme in the right view of the motors, the pump casing as well as the oil pipe from the base of the crankcase can be seen just in front of the flywheel. The pump draws oil through this pipe and delivers it to a large cylindrical oil tank carried on the front side of the dash beneath the bonnet. From this tank oil feeds by gravity and the pressure exerted by the pump through separate leads to each of the crankshaft bearings. To oil the lower ends of the connecting rods the crankshaft has been bored. Through these leads the oil passes by centrifugal force and finally drops into the crankcase where the splash, which cares for the camshafts and cylinders, is produced. After going through this course the oil is filtered out through the pipe leading to the pump, ready once more to be sent to the oil tank and back again through the motor.

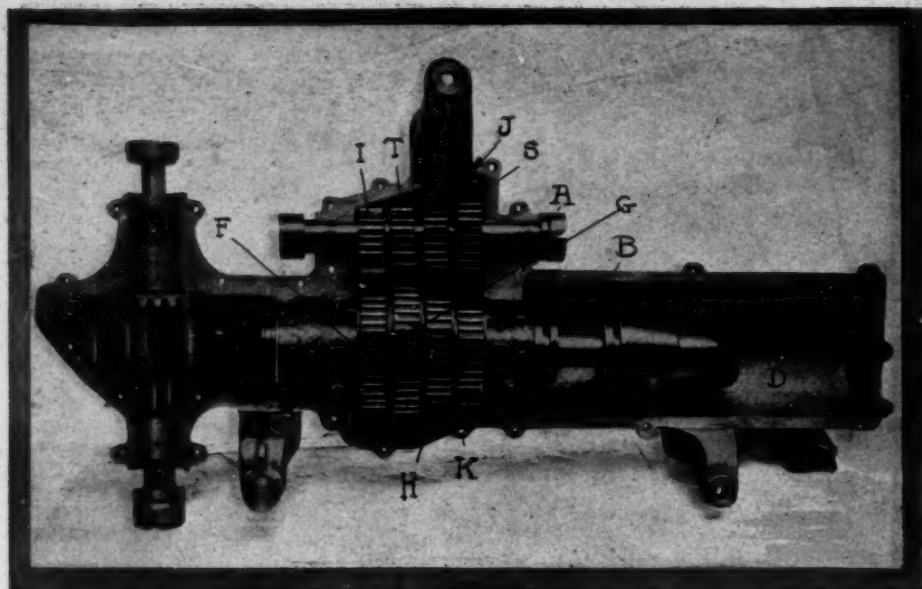
The clutch is of the inverted cone type, the female portion being a cast iron flange piece bolted direct to the flywheel rim, enclosing the male part between it and the

side of the flywheel. The male cone is an aluminum casting carried on a sliding bronze collar. A partially flexible coupling between the clutch and gearbox is in the form of a squared sleeve on the rear end of the former shaft for receiving the slightly rounded front end of the shaft from the gearbox.

Coming to the gearbox, it is noted that the aluminum casing, divided horizontally into an upper and lower part, is divided in line with the three shaft bearings and that the use of side chains for final drive necessitates the carrying of the differential gears in the rear part of the case. The use of a very long gearcase is most conspicuous in the illustrations. This abnormal length is occasioned by the peculiar design of the gearset. The shaft A, which can be called the mainshaft, connects directly with the clutch and has on it four gears that are keyed directly to the shaft. The shaft B, better known as the sliding shaft, has on it four gears that are not keyed to the shaft but ordinarily ride idly upon it. These four gears are always in mesh with the corresponding gears on the mainshaft A. When the motor is running and the clutch thrown in, the shaft A and its gears and also those gears on the shaft B are rotating, but the shaft B may remain stationary. To understand this, a glance at the dissembled view of the gearset will aid in the explanation. The shaft B is shown removed from the case but a couple of its gears F and G are left in place, while the gear H is shown off the shaft and one gear K still in position on the shaft. Within the gear H is contained the two frictions, E, each semi-circular in shape and of sufficient size so that when in place with the gear H they fill up the space within the flange ring L on the side of the gear and form a bearing, as it were, for the part H of the gear. Ordinarily the gears loosely revolve over these friction rings formed by the pieces E. To lock any one of the gears on the shaft B to the shaft a sliding shaft M passes



RIGHT SIDE OF THE BERKSHIRE MOTOR



BERKSHIRE GEARSET WHEN ASSEMBLED

through these friction pieces. This shaft is moved by means of a sliding cone and when it enters the frictions E it operates on a set of short fulcrumed levers so that the opposite ends of the levers move wedges forward and backward. At the same time a set of small radial pins N is forced outward from the periphery of the sliding shaft. These pins expanding the frictions, lock them with the gears and so couple the gears with the shaft. In this way, when the gear K is locked to the shaft B, the drive is from shaft A through gears S and K, thence to the jackshaft and by side chains to the rear wheels. This is high speed and it will be noticed that on this speed the drive is not direct but, as on all other speeds, the power is transferred from the mainshaft A to the countershaft B. On second speed the gear H is locked in position; on first speed G is locked and on the reverse an idler is interposed between gears F and I. All gears are of nickel chrome steel cut and hardened in the company's factory. The entire transmission is after the design of one of the members of the firm. The shafts are heavy and are carried on four long bronze bearings, each lubricated from a separate lead from a compression gearcase cup carried on the dash. This cup, with its four branches, is visible at the left side of the dash, as is the crossed head on the cup plunger for forcing the grease to the bearings. The entire gearcase D takes its support through three arms—two on the right and one on the left. The differential is of the bevel pinion type and is attached in conventional manner to the inner ends of the divided jackshaft. The jackshaft consists in reality of four short shafts placed end to end. The two inner ones secured in the differential and the outer two carrying the sprockets for chain drive and united with the inner shafts through a jaw coupling. These inner shafts are carried in bronze bearings in the ends of the gearbox, but the outer shafts are sup-

ported on Hess-Bright bearings so located that they are outside of the sprockets. In this way the chain strain comes within the bearing. Placing the bearing out so far calls for the use of a very large bracket carried on the outside of the main frame and rigidly bolted thereto. This design results in the rear wheels being very well outside of the frame pieces and allows of ample room for the sprockets and brake drums.

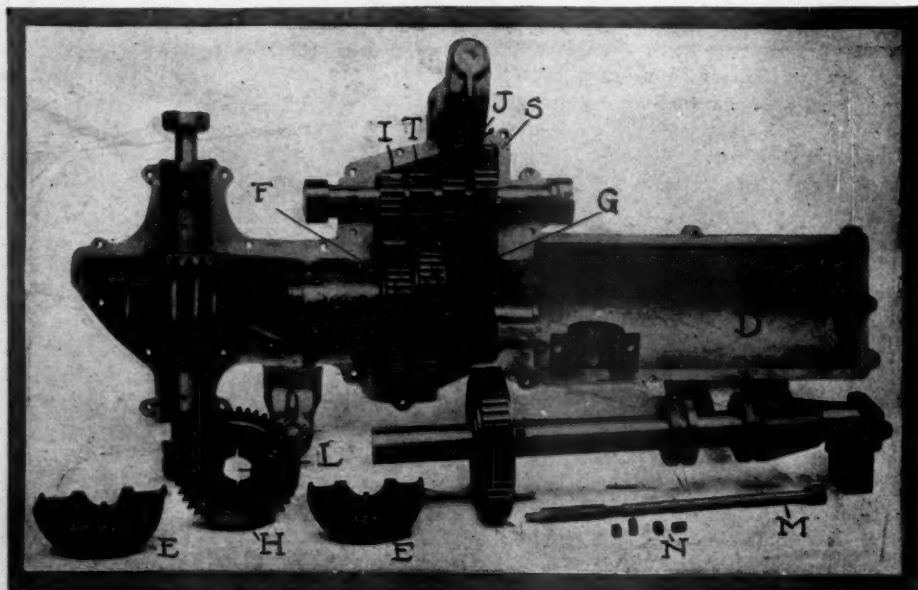
In the view of the jackshaft bearing, the reader can study the back axle design as well as the hub design used in the wheels. The chain sprocket, of the ring type, is bolted to the end of the brake drum. Within this drum operates the expanding emergency brake and on a small projection of the drum is the band brake for regular use. This gives a wide drum effect and naturally throws the road wheel out from the frame, but this is further increased by dropping the back axle between the edge of the drum and the seating for the

springs. The springs are, however, placed directly beneath the side pieces of the frame. Radius rods of the banjo type connect the brake drums and the jackshaft bearings, the large ends of the rods serving partly as a cover for the emergency brake drum and rendering it dust-proof. Diamond, one and one-quarter pitch, chains are used.

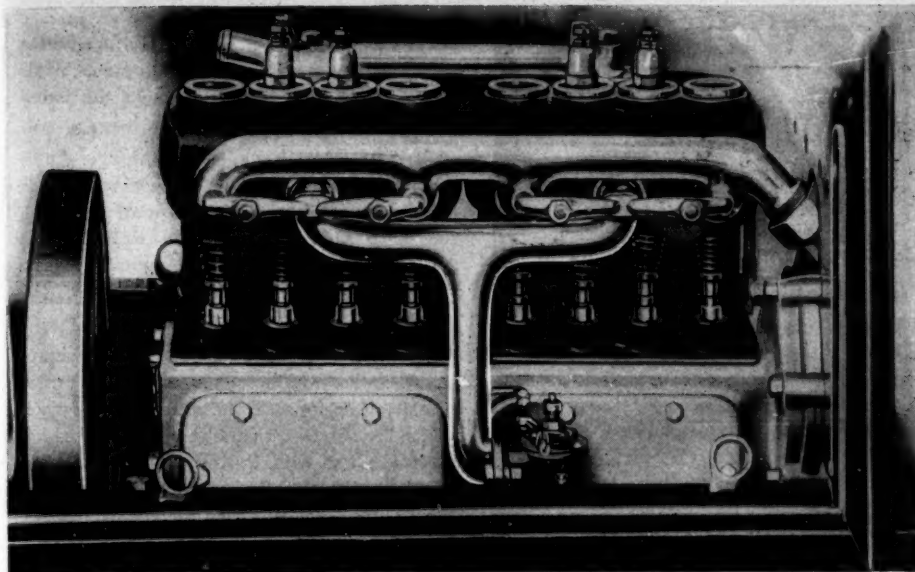
Both axles are solid forgings of the one-piece type, the forward one centrally dropped. Both are of square section at the ends but rounded in the center. Half-elliptic springs are used throughout. The emergency brakes are operated by side lever and when applied release the clutch. The regular pair is applied by pedal, the clutch not being released with their application. The framework is of conventional pressed steel lines, the side pieces being slightly offset alongside of the motor and tied together by channel cross pieces reinforced by upper and lower gusset plates. A subframe serves in carrying the motor and gearbox and is supported at the rear by dropped arms from a crosspiece, the dropped arms serving to considerably lower the center of gravity of the car. The steering gear, of the worm and segment type, rises at an easy angle from the base of the dash and carries a 20-inch steering wheel on which are throttle and spark control. Steering knuckles are of the Le-moine variety. Control parts are standard—at the right are the speed change and emergency brake levers and in the foot-board are clutch and brake pedals.

THE LITTLE FORD MOTOR

MOTOR AGE illustrates this week right and left side views of the 15-horsepower, four-cylinder motor used in the \$500 Ford runabout, built by the Ford Motor Co., of Detroit. The motor is of the four cylinder, vertical type with the cylinders cast in pairs and having the mechanical inlet and exhaust valves carried in ports on the left side and one camshaft serving for both sets. The motor is of the accepted four-cycle variety



BERKSHIRE GEARSET PARTLY DISASSEMBLED



LEFT SIDE LITTLE FORD MOTOR

and is water cooled. The cylinders have a $3\frac{3}{4}$ -inch bore and $3\frac{1}{4}$ -inch stroke and are finished inside by a reaming process whereas the piston rings are ground. The crankcase, an aluminum casting, is best described as being a tubular cylindrical housing open at the rear end in which bolts the bearing plate for the crankshaft. On the left side are two fairly large inspection plates and on the rear end of it is a flange to which is bolted the front of the housing which contains the planetary gearset. The half-time gears are carried at the rear and are enclosed within an aluminum housing as shown. Contrary to general practice the flywheel is carried at the front immediately in rear of the radiator and having its spokes in the form of propeller blades acts as a cooling fan. The crankshaft is a three-bearing forging, with the bearing between each pair of cylinders $2\frac{1}{2}$ inches long and those at the front and rear 3 inches in length. All bearings are $1\frac{1}{2}$ inches in diameter with babbitt lining. On the pistons are four compression rings of the eccentric type. Connecting rods are drop forgings with bronze bushings at the upper ends, which are split, and the lower end with a combination bronze and babbitt bearing and the connecting rod cap hinged in position. The camshaft is encased in the crankcase and carries its eight cams in standard form. The water pump is carried in the base of the radiator and takes its drive by spur gears from the crankshaft. Push rods work in brass guides secured in the top of the crankcase. The valves are integral forgings ground to a finish and held to their seats by the usual springs surrounding the valve stems. Access to them is through threaded inspection caps in the top of the ports, the intake caps carrying the spark plugs. Mixture is furnished from a Holley carburetor located at the side of the crankcase at the left, the mixture to the cylinders passing by way of a T-shaped piping to the cylinders. A single casting pipe suffices for conducting the exhaust, the pipe being slightly above the valves and se-

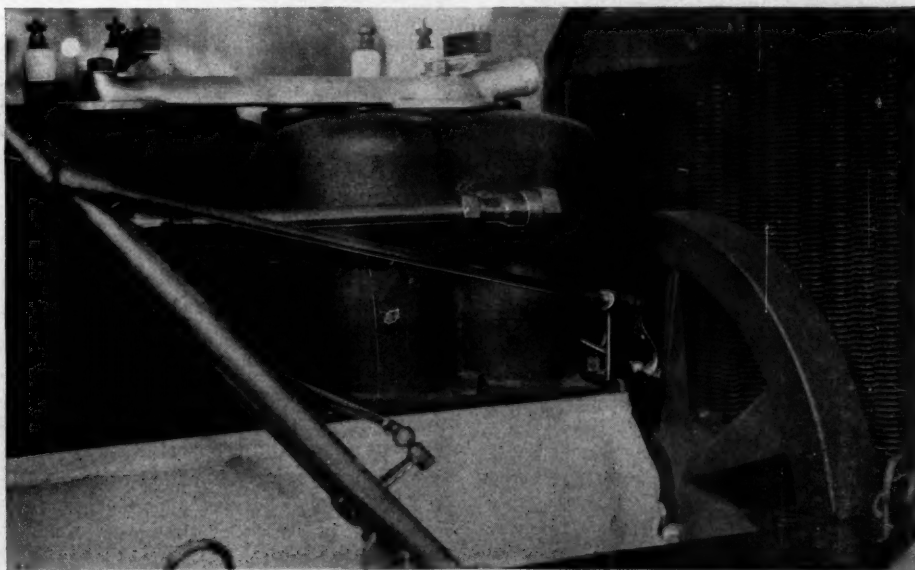
cured in position by four yokes with central bolt, these yokes also holding the intake pipe to the cylinders. Ignition by jump spark is installed, the current coming from a double set of dry cells of five cells each. Water enters the jacket on the right side and exits through a casting on the top, and it is of interest to note that this casting is made integral with the cylinders. Lubrication is by a McCord sight-feed oiler, which delivers its supply directly to the crankcase and has, of course, other leads connecting to other parts of the machine.

LITTLE BUT USEFUL

Handled by the Automobile Supply Co., Chicago, Ill., the Hush muffler, comparatively new to the trade, is simple and decidedly unique. It is a long, cylindrical chamber resembling a length of common stove pipe and is divided into four compartments by three partitions placed across its bore. In the center of each partition is an opening of one-third the diameter of the muffler. Fitted tightly into this opening is a cone piece with perforations near its end. The gases enter one

end of the outer casing and passing through these three partitions by way of the cone perforations exit into the outer air. This supply house also sells the Springfield Automotoneer, a combination lifting jack by which the four wheels of an automobile can be raised at once. The jack is in reality four jacks, one for each road wheel, but the two jacks for elevating the right side wheels as well as the two for the wheels on the left, are arranged in pairs and connected so that the turning of one crank works both of them in unison. The jacks work on the spiral screws principle, the screw being raised through a pair of bevel gears operating from the crank. Two parties can raise the four wheels of a car at once.

The Manhattan Storage Co., New York city, retails tire alarms, little devices attached to the rim of each wheel which set up a ringing noise when a tire becomes deflated. The device is a small metal disk secured to the side of the wheel rim by a pair of screws. Connected to the center of the disk is a bent spring, the end of which rests against the side of the tire so that with the tire properly inflated this arm is held by means of its tension close against it, but with the first deflation the end of the spring strikes upon the ground and gives the alarm. This concern sells the P. T. C. power tire pump which is designed so that the motor of the car does the pumping. It is a two-cylinder pump with the cylinders placed side by side and the crankshaft driven by means of a friction pulley off the crankshaft of the engine. The pump is secured permanently to the car and while weighing less than 7 pounds and measuring 8 inches long, 7 inches wide and 6 inches high, is capable of giving any desired pressure in the tire. The friction wheel of the pump is moved into contact with the friction wheel on the engine by a set screw. The pump is well made, having cast iron cylinders and pistons, steel crankshaft, aluminum crankcase and base and phosphor bronze bearings for the crankshaft.



RIGHT SIDE LITTLE FORD MOTOR



CHINESE ROYALTY IN MINNEAPOLIS, MINN.

Name by the Yard—The Societa Anonima per il Commercio e l'Industria di Automobili, Velocipedi e pezzi di ricambio Fabbre & Gagliardi is the name of a new motor car concern started in Milan, Italy.

O.K.'d by Kaiser—Kaiser Wilhelm helped design the new club badge of the German Imperial Automobile Club. It bears the Prussian eagle in an oval, with the letters K and A on each side and the C beneath the centerpiece. The car plaques are larger replicas carried out in a circle.

Chinese Interested—While on their inspection tour of the United States, Prince Tai Tseh and Tso Ping Lung, his secretary, of the Chinese commission, were taken automobile riding in St. Paul by C. E. Stone, general traffic manager of the Great Northern, and Louis W. Hill. The party went in a Pierce car.

Denver's Show—One more show is on the tab before the end of the show season—Denver, from April 18 to 21 inclusive. It is a sanctioned affair, too, and is expected to be liberally supported by both western and eastern manufacturers. The exhibition will be held in Coliseum hall, which will be elaborately decorated for the occasion.

Knows How the Bull Felt—A chauffeur for the Ohio Automobile Co., of Cincinnati, now knows how the bull felt in the china shop. Recently, while turning sharply to avoid an approaching street car, the big car he was driving started to skid on the wet and slippery street. The curbstone failed to stop it and it continued on into a shoe store on the corner. No one was injured—just the car, and \$400 will pay the repair bill.

W. K. Buys Racer—From the fact that W. K. Vanderbilt, Jr., has ordered a six-cylinder Mercedes racer while in Paris, it is taken as an indication that the American intends to dabble in racing himself this coming season. Mr. Vanderbilt wants a motor with at least 125 horsepower and of particularly high gear. He will race no other car, he says, if the Mercedes comes up to expectations. Mr. Vanderbilt has just completed a 3,000-mile tour

in the south of France and Italy, going through without a stop occasioned by mechanical or tire troubles.

Roe Goes to Porto Rico—Tom T. Roe, with the Frayer-Miller people, sailed last Saturday for Porto Rico with a car which goes to Auditor Ward, of Porto Rico. Roe will be gone 3 months, in which time he will demonstrate to the Porto Ricans the fine qualities of the Frayer-Miller.

Pope Anti-Automobile—Despite the fact that many automobilists have attempted to convert Pope Pius to motoring, he refuses to be convinced. In fact, he frowns upon any member of the sacred college who dares to be modern this way. There is one cardinal, however, who is an ardent motorist.

According to Earle—State Highway Commissioner H. S. Earle, of Michigan, is credited with the following advice on good roads: Don't scrape worn-out mud back into the road. Don't build wooden culverts, because they rot out. Don't forget to collect your poll taxes. Don't gravel an ungraded road. Don't call crushed stone poured in between two ditches a macadamized road. Don't expect a road to be perfect when it is built between canals or water courses or ditches.

Quakers Choose Directors—At the annual meeting of the Automobile Club of Philadelphia last week the principal business was the election of three members of the board of governors to take the places of those whose terms had expired. J. Maxwell Bullock, John R. Wiggins and Henry H. Roelofs were the fortunate ones. They will serve 2 years each. The hold-over members are William A. Dick, Isaac Starr, J. Emlen Smith and H. Bartol Brazier. The board of governors at its next meeting will elect the other officers of the club. William A. Dick, who a fortnight ago was elected to fill out the unexpired term of President Starr, who resigned to accept the presidency of the new Pennsylvania Motor Federation, will in all likelihood be chosen president. The committee in charge of the work of placing signs along the Atlantic City route reported that permission had been secured

and that their task would be completed before the season opened. A club emblem for the members' cars was adopted. It is made up of the coat-of-arms of Philadelphia within a circular wreath.

C. A. C. Auxiliary—The Chicago Automobile Club Auxiliary Association has been formed for the purpose of building the new \$150,000 home of the Chicago Automobile Club at 15-19 Plymouth court. The auxiliary association will lease the property to the club proper.

Waking Up—Kent county, Michigan, has 2 miles of improvement built under the specifications of the state highway department, and towards the cost of which the state has contributed a bonus of \$500 a mile. Commissioner Earle wants the people of Grand Rapids to spend \$90,000 on Kent county roads and thus get \$40,000 additional from the state.

Blind Boys at Show—A bunch of blind boys from the Perkins Institution for the Blind took in the recent Boston show, a teacher accompanying the boys, who learned something about automobiles through their finger tips. So acute was this feeling that Tommy Stringer discovered a crack in the lens on one of the lamps on exhibition, when the attendant declared such a thing impossible. The Baby Rep also made a hit with Master Thomas.

Road Race in Doubt—Members of the Terre Haute and Indianapolis automobile club who had been considering a team road race across Indiana have given the matter further consideration since their attention has been called to the state law regarding speeding in automobiles. Now the talk favors an endurance contest instead, the winners being decided on gasoline consumption. The original proposition was to match six Terre Haute cars against a like number representing Indianapolis, the losers to pay for a banquet, to be held in the Hoosier metropolis.

Race Meet Plans—After a consultation of the officials of the Jacksonville Automobile and Motor Boat Association and an inspection of the course that will be used for the Florida race meet starting April 9, it has been decided to make Burnside the starting point. For a distance of 12 miles mile posts will be placed at every mile, and after that a post will be erected at every fifth mile, the posts continuing over a 30-mile course. Arrangements have already been made for having four spans of the pier removed, giving a clear opening of 60 feet, and the upright on either side, thus furnishing a guiding pillar for the drivers of the racing cars. The 100-mile race will be abandoned, and in its stead will be a 60-mile race, to establish a new record and for the Sara Bernhardt trophy. The following is the list of new officers chosen: President, Charles A. Clark; first vice-president, Walter P. Corbett; second vice-president, W. R. Rannie; third vice-president, E. A. Groover; secretary—

treasurer, Herbert B. Race; board of directors, D. H. McMillan, H. C. Hare, C. E. Garner, and the other officers of the association.

Serpellet Steamer—There is in progress of construction in France a Serpellet steamer which is expected to be able to go at an average speed per hour of 124.4 miles. This is not quite up to the Stanley mark made at Ormond. That was 127.66.

Stranded in Snow—The Reginald Vanderbilts report a chilly experience in Switzerland. While touring with friends from Macon to Geneva their big 60-horsepower car was stranded in a snow drift near Roche Coupee and the motorists had to walk several miles through the snow to secure assistance.

Foolish Negro—An unknown Nashville negro who owned a common, every-day sort of a bicycle accepted a tow from a colored friend who possessed a motor cycle, and nearly paid dearly for his pleasure. The tow rope was 15 feet long, which necessarily caused the cyclist to follow some distance behind. The result was that an automobile, the driver of which did not notice the rope, cut in between the two, the negro on the bicycle being thrown and run over by another automobile. He was only slightly injured.

Interested in Climb—There are a number of Philadelphians who believe they have hill climbers par excellence, and will enter their cars in the Wilkes Barre climb next May. Maxwellites and Reoiters are especially cocky, and both factions are going about with chips on their shoulders and claiming supremacy in their class. The Buick people expect to make a coup, while at the White garage there has already been set apart a corner of the handsome salesroom where the cup shall repose in all its splendor—unless, indeed, some private White owner shall do the trick, and insist upon taking the emblem home.

Outside the Law—In their desire to secure advertisement for their cars some agents lay themselves or their customers open to punishment for breaking the laws. For instance, on Sunday, the 11th, George E. Kane, of Philadelphia, drove his model F Ford stock car from the Quaker city to Dixmont, about 97 miles, in a trifle under 4 hours, which figures up about 24 miles an hour—a clear infringement of the new speed law. Nevertheless, each of the local dailies was given a detailed account of the feat. Some of these days an investigation and arrests will follow a similar stunt, and then the details will be kept sub rosa, except among the elect. The trip under consideration was made at an expenditure of 5 gallons of gasoline, 1 pint of lubricating oil and 1 quart of water. The low gear was not

in use once during the journey, and the route is hilly to a degree.

Cup Candidate—Breese, Lawrence & Moulton, who have begun the manufacture of a car to be known as the B. L. M., are to build a Vanderbilt cup candidate. The senior member of the firm is a son of James L. Breese, of racing fame. A factory has been established in Brooklyn.

Road Signals—The Cleveland Automobile Club has decided to use the ordinary road signals this year. Waving the right hand to the right denotes the direction that will be followed. A wave to the left means a turn in that direction, while holding the hand straight up in the air means a stop.

Students Probe—Students at Purdue University, at Lafayette, Ind., are greatly interested in the testing department. George W. Wildhack and W. Macartney, both seniors, will make a test of the two Haynes models. Professor T. W. Esterline, of the department of electrical engineering, will carry on a series of tests of ignition.

Raises Legal Point—O. R. Baldwin has been granted the contract for carrying mail from the central station, Detroit, to the new sub-station at Russell street and Lyman place. He will use an automobile for the purpose, but has raised the point that a government wagon does not have to take out a city license. This service will be the first of its kind in America.

One Willing Worker—W. W. Pickerill, president of the Tacoma Automobile Club, has had about 100 signal signs painted according to the code prepared by the American Automobile Association, and these will be placed at points where they will do the most good. Quite a number of cross roads signs have also been painted, which give directions and distances to the important points in the county. All that remains is to place them, but while the

work is extensive, it will soon be done, as Mr. Pickerill has already figured out just where they shall go.

Collins, Too—Fire Chief Champion, of Chicago, has started the other city officials going and now Chief of Police Collins is about to break forth with an up-to-date automobile. Chief Collins is of the belief that all commanding officers should be equipped in the same manner.

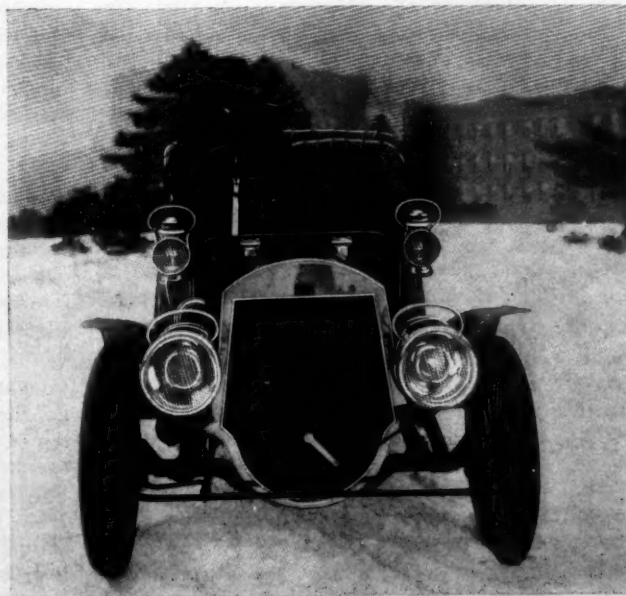
Italy in Grand Prix—Three makes of Italian cars will be represented in the French grand prix. Lancia, Nazaro and Weischott will drive Fiats, Cagno, Cedrino, Matteo and Fabry are named as Itala drivers, while Raggio, winner of the Florio cup, has switched from the Itala to the Marchand, a new machine.

Clearly without Prejudice—So extensive are the Baldwin Locomotive Works, of Philadelphia, that the management has provided a model K Winton to transport visitors around the big plant. One would have imagined that the Baldwinites would have been sufficiently prejudiced to put one of the steam cars on the service.

Winter Touring—Victor Williams, accompanied by Arthur Odell, drove from Kalamazoo, Mich., to Chicago, starting Monday morning and finishing Tuesday afternoon. Williams was driving his father's car, a 40-horsepower Royal Tourist, to the McDuffee Automobile Co., in Chicago, to have it overhauled for the summer. Near Valparaiso they were stuck in a snowdrift, but otherwise the trip was an uneventful one, although cold. They stopped in La Porte Monday night.

Cups for Clevelanders—Five cups will be awarded this year by the Cleveland Automobile Club to its touring members, an increase of three over last season. Four cups will be distributed, one each quarter, and the fifth will be awarded to the holder of the greatest mileage record at the end of the year. At least twenty-five members must qualify for the fifth cup, and for the others fifteen. The quarters will be arranged as follows: April 1 to June 30, inclusive; July 1 to September 1, October 1 to December 1, and January 1 to March 31.

Who Deming Is—Paul H. Deming, the new chairman of the A. A. A. touring committee, is a graduate of Cornell University, and at present a resident of Detroit, Mich. He has been an ardent tourist at home and abroad, having driven in practically every European country. His record in the east includes first-class certificates for the New York-Rochester endurance run of 1901, the Long Island 100-mile non-stop run, the A. C. A. non-stop run and the New York-Boston-New York reliability tour of 1902. He won a medal in the New York-Pittsburg run of 1903.



TOM ROE IN FRAYER-MILLER CAR

LEGAL LIGHTS AND SIDE LIGHTS



FIGURES ON TERROR

The degree of care required of the driver of an automobile where children are encountered on the street, and the right of the driver to assume that such children will not put themselves in a dangerous place, was discussed in the case of *Thies vs. Thomas*, before the New York supreme court. This case may be held as authority for the statement that if an automobile comes upon a boy under circumstances calculated to produce fright or terror, and such fright causes an error of judgment, by which he runs in front of the automobile, the child is not guilty of contributory negligence.

Where the negligence of children is involved it is the duty of the jury to determine whether the child had sufficient discretion and ability so that he could be left with a reasonable degree of safety in the street alone, to take care of himself, the court held. If the child has sufficient discretion and ability, he is responsible for his acts, and is bound to exercise that degree of care which can be reasonably expected of one of his age and condition under the same circumstances; if he fails to exercise that degree of care, and such failure contributes to the injury, the defendant would be entitled to a verdict.

Being or playing upon a street is not of itself contributory negligence in a child; whether it would be contributory negligence would depend upon the condition of the street. The court says: "No owner or operator of an automobile is, therefore, exempt from liability for a collision in a public street by simply showing that at the time of the accident he did not run at a rate of speed exceeding the limit allowed by law or the ordinance. On the contrary, no matter how great the rate of speed may be which the law and the ordinances permit, as a general rule he still remains bound to anticipate that he may meet persons at any point in a public street, and he must keep a proper lookout for them, and keep his machine under such control as will enable him to avoid a collision with another person also using proper care and caution. If necessary, he must slow up, and even stop. No blowing of a horn or whistle nor the ring-

ing of a bell or gong, without an attempt to slow the speed, is sufficient if circumstances at a given point demand that the speed should be slackened or the machine stopped, and such a course is practicable."

The true test, as laid down by this case, is that he must use all the care and caution which a careful and prudent driver would have exercised under the same circumstances. Every operator of an automobile has the right to assume, and to act upon the assumption, that every person whom he meets will also exercise ordinary care and caution according to the circumstances, and will not negligently or recklessly expose himself to danger, but, rather, make an attempt to avoid it. It is only when such an operator has had time to realize, or by the exercise of a proper lookout should have realized, that a person whom he meets is in a somewhat helpless condition, or in a position of disadvantage, and therefore seemingly unable to avoid the coming automobile, that the operator is required to exercise increased exertion to avoid a collision. This applies peculiarly when children of tender years are met.

GOPHER LICENSE UP AGAIN

Minnesota automobilists are once more up in arms over the license question. The discussion of a year ago, when it was proposed to test the constitutionality of the license law, has been removed, and there is every prospect that the matter will be taken into the courts in deadly earnest by the motorists, who believe they are being unfairly dealt with. The trouble arises from the adoption of the new code of statutes, March 1. As stated in the columns of *MOTOR AGE*, the revised code changes the license law, so licenses are now issued by clerks of towns and municipalities instead of by state boiler inspectors, as before. As soon as the code became effective, the city clerks of Minneapolis and St. Paul, with the prospect of fat fees before them, sent out notices to every automobile owner in the respective cities to step up and pay up. This was startling news to the automobile owners, who at once became indignant at the idea of having to renew licenses which were issued for the life of the car licensed. The city clerks maintain that as far as they are concerned, no car is licensed until it has been licensed from their offices. The owner must again pay up his \$2, one-half of which goes into the clerk's pocket. The automobile owners, who, in the first place, set up the claim that any license fee was double taxation, inasmuch as they

pay on the valuation of their cars, now protest that they will not stand for a renewal tax on the license basis. The automobile owners submitted to the original license provisions of the 1903 law without a contest in the courts, because they recognized its value. All cars in the state were numbered consecutively, those in St. Paul starting with 1, those in Minneapolis with 600, and other numbers being given to boiler inspectors in different counties. Under the new system each municipality and township will have its separate system of numbers, beginning with 1. The owners claim that any advantage the number system may have had, in the identification of cars, is done away with under the new law, as the number does not show whether the car is from Minneapolis, St. Paul, Stillwater, Sauk Centre, or other locality. There are nearly 1,200 automobiles in Minneapolis, St. Paul and nearby towns, and there is prospect of a good fight if the contest reaches the courts, which many anticipate it will do before the end of another season.

FOR JURY TO DECIDE

The supreme court of New York has held that the question of contributory negligence on the part of a child of tender years, injured in an accident, is one for the jury as a fact to be determined from the evidence. This came up in the case of *Buscher vs. the New York Transportation Co.* The action was brought to recover from the defendant for the death of plaintiff's intestate, by one of defendant's automobiles. The evidence showed that the deceased was a bright, capable boy 8 years 3 months of age, capable in some degree of caring for himself while on the street. The automobile was running at a very rapid rate of speed and as it reached an intersecting street turned upon that street without slackening speed and without giving any signal of its approach. Two witnesses who crossed the street ahead of the automobile before the accident occurred were obliged to hurry to get out of its way. The automobile struck the boy as he was in the street 15 feet from the crossing and 2 feet from the curb. The supreme court held that the evidence was sufficient to justify a finding that the defendant was guilty of negligence in the operation of its automobile, and that the question of the boy's contributory negligence was for the jury. The court says: "A person, whether adult or infant, had the right to assume that the defendant, in the operation of the automobile, would exercise care and respect the rights of pedestrians when it has occasion to turn the corner of the street. Due care in its operation required, under such circumstances, that the vehicle should be slowed down and operated with care. At such place the operator was bound to take notice that people might be at the crossing or entering thereon; and this obligation on the part of the operator of the machine

was one which a pedestrian would have a right to assume would be observed."

The court holds that in the case of infants under 12 years of age the burden of proof in accident and negligence cases is on the defendant to show the possession by such infant of sufficient mental capacity to understand, appreciate and guard against the situation in which it is placed, and while the infant of tender years must be held to the exercise of some care, yet in the case of an infant under 12 years of age the question of whether he was guilty of contributory negligence or not is for the jury as a question of fact to be determined from the evidence.

MOTOR CYCLE RULING

Through the legal assistance furnished by the Federation of Motorcyclists, David L. Carroll has succeeded in securing a ruling from a North Carolina court that the streets of Reidsville can be used by motor cyclists. The case has been pending for several months and finally did not come

up until March 2, and then it was settled with a neatness and dispatch that must have startled Mayor Watt, the author of the ordinance, and the other city fathers. Although he was in court—the superior court of Rockingham county—and ready, Mr. Carroll was not even called to stand trial. The court simply ruled that the Reidsville ordinance was clearly unconstitutional and could not prevail.

"No law can be passed that prohibits the use of motor cycles on the public streets and highways," he added.

The case was first called to the attention of the F. A. M., in September last, when Mr. Carroll applied for advice and assistance. Counsellor John C. Higdon, chairman of the F. A. M. legal action committee, promptly advised him to do two things—to join the F. A. M. and to get arrested for violating the law. Carroll did both things. For violating the law he was fined the limit, \$2. He promptly appealed to the superior court of Rockingham county. Chairman Higdon filed a

strong brief in the case in which he set up that the motor bicycle "is merely a bicycle with certain machinery attached" and attacked the constitutionality of the measure. Mr. Carroll was also assured of the financial support of the F. A. M. Pending the appeal several efforts were made to have him withdraw the proceedings, but he had been duly impressed with the importance of the results in establishing a precedent and stood firm. The case was the first known instance in which the right to use motor cycles on the public highway had been denied.

PROGRESS OF UNWIN CASE

The Unwin test case of the constitutionality of the license requirements of the New Jersey automobile law has so far progressed that it has been heard in three courts and is now before the supreme court of the state. It will reach the court of errors and appeals in June. From there it is planned to take it up to the United States supreme court.



THE READERS' CLEARING HOUSE

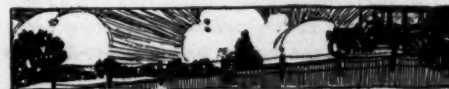


ONE MAN'S IDEAL

Kansas City, Mo.—Editor MOTOR AGE—I believe every automobile student has some idea of an ideal automobile and would like to have the weak points of his ideal machine shown. It also seems to me that a page devoted to the discussion of this subject would be interesting. I append my idea of the perfect machine and will be much pleased if you will criticize the plan and explain the weak points. The ideal machine as I see it would be a single-cylinder two-cycle air-cooled vertical engine 5½-inch bore and 5-inch stroke; connected by a disc clutch direct to a direct current electric generator of speed and power to balance properly with the engine, these two machines to be under a front hood and assembled like the Strang electric car explained in MOTOR AGE of February 22. The engine and generator should furnish current for two motors of 3½ horsepower each, capable of 100 per cent overcharge, placed one in and not on each front wheel of the car, and pulling directly on the hubs thereof, and to a 30-cell battery placed under the driver's seat. This ought to be so connected that when the power being generated is in excess of that needed by the motors the surplus would be stored in this battery and when more power is needed than is being generated it will be drawn from this battery. This is the principle used in the Strang electric car. The plan will keep the engine and generator running at an even speed, thereby reducing the use of the spark and throttle control of the engine to the minimum. The increase or de-

crease of speed or power should be through a rheostat and controller in the electric circuit. The battery would furnish current for the spark plug and for lighting the car. Steering ought to be through worm and sector to the front axle knuckles; oiling by mechanical oiler for the engine, generator and motor; wheels to be 34 by 4-inch, fitted with solid tires; wheelbase, 90 inches; tread, 56 inches; frame of pressed steel, with four full elliptic springs of as great length and flexibility as possible; large band brakes on the rear hubs. The body should be of the surrey type with side entrance and rear seat detachable and without doors. This kind of a car will give the greatest results with the least complication, and the cost should be less than that for the average four-cylinder car made today. There must, however, be some reason why this style of car is not made and I would like to know what these reasons are.—KNOWLEDGE SEEKER.

The columns of MOTOR AGE are open for reasonable discussion at all times, which is invited. Knowledge Seeker will find that, while he has good reasons for designing a machine such as he suggests, the next man may have equally good ideas, although vastly different from those of others. There are many things that are vastly different, yet all are good; so with automobiles. There are so many things to be taken into consideration that what suits one man might be useless for the next.



A SMALL RUNABOUT

Chicago—Editor MOTOR AGE—Please answer through the Readers' Clearing House the following questions:

1—What difficulty is there in assembling the parts of a small automobile, provided the more important parts, such as motor, transmission, steering gear, etc., are purchased from some reliable house? The automobile I have in mind is a small runabout, with from 5 to 8 horsepower motor.

2—Which is better, water-cooled or air-cooled motor? As I understand it, the water-cooled motor will necessitate a radiator, while the air-cooled motor will have to be exposed to the air.

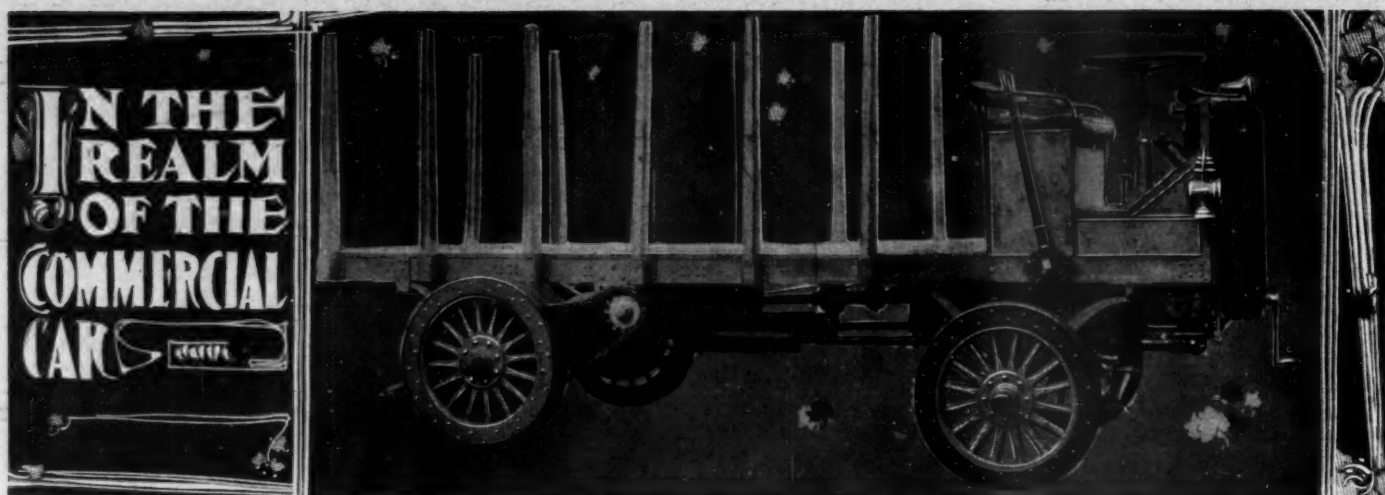
3—Which will prove the best kind of transmission, sliding gear, planetary or friction drive?

4—Should the motor be placed under the seat or over the rear axle?

5—Which type of motor is considered the better, air-cooled or water-cooled, and should it be four-cycle or two-cycle?

6—What is the best make of runabout not exceeding \$1,500?—EMMONS BLAINE.

Assembling will require some knowledge of mechanics, a small shop, a good deal of expense and considerable patience. It has been accomplished in such a manner as to save money, but it is not all plain sailing by any means. The assistance of a man who has had experience might be advisable until the heavy work had been finished. A water-cooled motor will require a radiator and pump and the necessary connections; an air-cooled motor will require a fan to assist in cooling. There are advantages and disadvantages in each type and advocates for each. It will require a study of the merits of each for the questioner to decide for himself. The same answer applies to the questions regarding the two-cycle and four-cycle motor and the transmission.



NEW YORK'S LATEST HEAVY TRUCK PROPOSITION

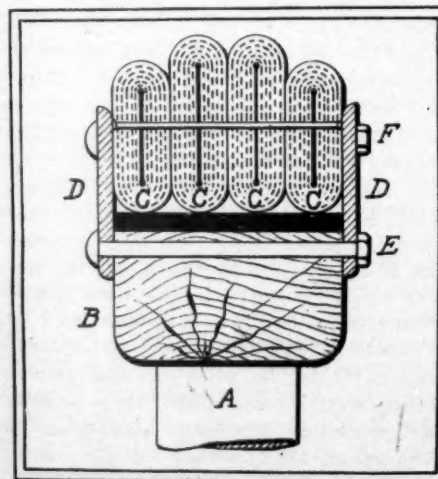
NEW YORK city has had another large commercial truck added to its list of motor car productions—a 3 to 4-ton wagon built by the Commercial Motor Car Co., 4 East Forty-second street. The wagon, of the gasoline type, is built after the design of A. J. Slade, a New York engineer, who has had considerable experience in the gasoline line. The truck possesses as its distinguishing features a four-cylinder, water-cooled, horizontal motor of the Brennan type, in which the cylinders are placed in pairs on opposite sides of the crankshaft. This shaft is placed lengthwise of the car the same as in an ordinary vertical cylinder machine. Drive from the motor is through a disk clutch and individual clutch transmission, thence by propeller shaft to a jackshaft in front of the rear axle, and finally by side chains. Few makers of high-powered motors—this one is rated at 30 to 40 horsepower—have succeeded in locating both motor and gearbox in such accessible positions. The motor is completely in front of the forward axle and the gearbox directly above the axle and beneath the seat. This makes it possible to inspect or repair both the motor and gearbox without removing the load and also allows of a very large load-carrying platform in the rear of the seat. The dimensions of this platform are: Length, 12 feet; width, 6 feet. Returning again to the motor. Cylinders are separate castings with the heads, walls and valve ports cast integrally. The first mentioned parts are considerably arched, giving a semi-spherical combustion chamber. The motor is very compact, made possible by having the valve ports on the forward cylinder on each side in front and that on the rear cylinder to the rear, permitting the cylinders to lie close together and allowing of the use of an exceptionally short crankshaft. By this arrangement the length of the motor from front to rear is not more than half of that of the vertical four-cylinder motor. The exhaust valves are mechanically operated from a conventional camshaft within the crank-

chamber; ignition is by jump spark, with current provided from storage batteries and with dry cells carried for reserve purposes. Mixture is supplied to the cylinders by a standard style float chamber carburetor, the gasoline flow to it being by gravity from a large-size fuel tank beneath the driver's seat. The control of the throttle is through a push-button, shown in the footboard just to the rear of the steering column, while the advance and retard of the spark is accomplished through a short horizontal lever on the dash. In order to efficiently cool the motor when running continuously on very low speeds it has been necessary to introduce a return-flow, tubular radiator of mammoth proportions, occupying the entire front of the machine from the top of the dash to below the level of the cylinder walls. Fifty-six pipes, of large diameter, constitute this cooling arrangement. The entire set is supported in an iron framework and the pipes carry the usual cooling gills. A typical circulation pump is used in conjunction with this. A cooling fan is not used. Mechanical lubrication is adopted.

Passing on to a consideration of the method of transmitting power to the rear wheels, the disk clutch merits first attention. It cannot be designated as of the multiple disk type. It possesses three disks, one of which is rigidly carried on the flywheel and the remaining two supported on the shaft coming from the gearbox. A sliding cone serves for forcing these disks together. The release is through a unique form of pedal on the toe board of the car. Instead of being a small pedal providing room for one foot, it is of the same length as the width of the footboard running entirely from right to left, so the driver can use either foot for pressing the pedal, or it can be operated by a second party if necessary. The gearset, affording three forward speeds and one for reversing, is carried in a large aluminum housing as close as possible to the motor, there being only room for the

motor flywheel and clutch between them. The gearset operates on the individual clutch principle and has the regulation mainshaft and countershaft carried in the same horizontal plane. The gears on both of these shafts are constantly in mesh. Those on one shaft are rigidly secured thereto, whereas the set on the other ordinarily runs idle except when locked to the shaft by means of clutches, these clutches being brought into use by a large lever, shown at the right of the driver's seat. Leaving the gearbox, the power is transmitted by a propeller shaft with universal joint in the center. This shaft transmits to the jackshaft through a standard differential. Supporting the jackshaft bearings beneath the side pieces of the frame has the advantage of not weakening the frame and also of allowing of the use of fairly short drive chains to the rear wheels.

In a consideration of the running gear of this truck, it must not be overlooked that the main framework is designed largely along the lines of accepted automobile practice, in that the main frame-pieces, of very heavy section, are slightly brought together at the front so as to carry the motor and gearbox direct with-



SLADE MULTIPLE TIRE

out the necessity of introducing a sub-frame. The side pieces of this frame are tied together throughout their length by numerous cross pieces which are riveted in position. Four very heavy semi-elliptic springs constitute the frame support on the axles. The forward pair is pivoted direct to a spring hanger in front and at its rear end works in sliding blocks beneath the frame pieces. Practically a similar method of attachment is used in the arrangement of the rear pair. Both sets are carried above the axle pieces, which, by the way, are of exceptionally large size, the rear one being straight throughout, but the forward one being slightly dropped. Wheels, of the heavy artillery type, contain sixteen spokes in the rear and the same number in front, those in the former being considerably heavier. These wheels are shod with a combination rubber tire which is best shown in the sectional view of the same. Looking at this illustration: A shows one of the wheel spokes, B the wooden rim, and C the four separate rubber tires that are used. These tires are of two sizes, the central pair having a depth of 3 inches; the outer pair is 2½ inches. The width of each tire section is 1 inch, giving a total tire width of 4 inches for supporting the wheel. Each of these solid rubber tires is of oval section with flattened sides, and is made of standard material. In securing them in position, side flanges D, held to the rim by a series of cross bolts E, are used. To further secure the tires between these flanges, a series of cross bolts F, piercing the center of the four tires, is added. These flanges are ¼-inch in width and the distance from the top of the flange to the top of the central tires is 1½ inches, so this amount of wear must take place before the flanges wear upon the ground. The braking system in the car is by a set of internal expanding shoes operating within the drums on the back wheels. These drums and sprockets are combined and are secured to each spoke of the wheels by metal clamps. The application of the brakes is by a pedal.

FOR ALASKAN USE

William H. Perry, of Dawson, Alaska, passed through Tacoma, Wash., on his way home from Los Angeles, where he purchased a waterless Knox of the commercial type, which he has had converted into a passenger car. It will be used between Dawson and Dominion Creek, a distance of 34 miles, and one round trip a day will be made. Perry has been in Dawson a number of years, and has disposed of his other business so as to be able to devote his entire attention to his new enterprise, which he is satisfied will prove a great success. The car is of 24-horsepower, and was used in Los Angeles for general truckage purposes. In Alaska the temperature during winter frequently drops to 70 below. Mr. Perry is satisfied his machine will be operated even at this

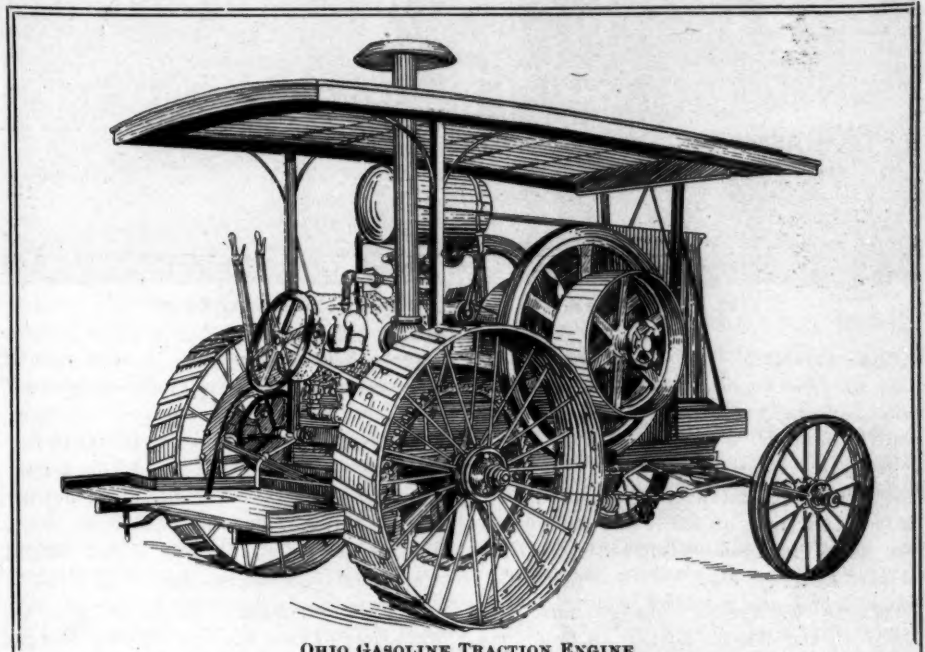
low temperature. He was in favor of an electric car, but could not secure the necessary power. The Knox has already been shipped north, and will reach Dawson about the same time Perry does. The road to Dominion Creek is in very good condition, the greater portion of it being gravelled. For the greater season of the year the roads are hard. This is the first use of automobiles in Alaska.

MADE FOR THE MINES

The Ohio Mfg. Co., Upper Sandusky, O., maker of gasoline traction engines, recently shipped one of its 15-horsepower engines to ex-Senator Warner Miller, of New York City, to be used in his mines at Hillsboro, N. M., for the purpose of haul-

being directed upwards into the air so there is not any danger of fire when traveling over dry grass. The motor cylinders are water-cooled, the leading cooling element being a large sized radiator carried on the front of the framework almost directly above the front axle. The usual circulation of water through the jackets and radiator is maintained in automobile fashion. Suitable arrangements are made for disengaging the drive to the road wheels when the machine is being used for stationary uses.

In testing this tractor the maker has found that it will successfully haul two wagons each loaded with 5 tons over 10 per cent grades at a speed of 3½ miles to



OHIO GASOLINE TRACTION ENGINE

ing ore from the mines to the railroad, a distance of 30 miles. The engine, as may be seen from the illustration, has about the same running gear design as is used on steam traction engines, possessing the small-diameter, narrow-tired, front wheels and the very broad steel tired rear driving wheels. Steering is by hand wheel and chains to the ends of front axle, the axle being pivoted in the center as in horse-drawn machines. The motor is placed well between the rear wheels, thereby giving good weight for traction purposes on the driving wheels and rendering steering fairly easy. The crankshaft is carried crosswise and has two large balance wheels, one on either end. On these wheels are gears for driving directly into ring gears on the driving road wheels. On the right end of the crankshaft is a broad pulley so such machines as threshers, grain grinders and saw mills can be driven from the engine. Carried well above the cylinders is the cylindrical gasoline tank from which the fuel feeds by gravity to the carbureter. The exhaust is through a small diameter, vertical stand pipe rising through the canopy top adjacent to the right driving wheels, the exhaust gases

4 miles per hour. These tests have further shown that fuel and water supply for 40 to 50-mile trips can be carried with ease. Besides hauling ore the engine can be utilized in baling water out of the mines, shredding and a variety of other uses in addition to those mentioned above. At present the company is working on a land roller for farm uses which will be propelled by a gasoline motor. Many advantages are claimed for this motor over the ordinary steam land roller. It will weigh from 3 to 7 tons, only 1 minute will be needed in starting it and the smoke nuisance and the danger of boiler explosion, always connected with steam boilers, will be eliminated. On estimations made the gasoline roller can be operated at an expense of only one-third the cost of keeping a steam roller running and it will have a reversing movement of the same speed as the forward movement. The roller carries a great many weights which when removed the tractor can be made use of in plowing, harrowing, sowing grain or in grading roads. With it, the maker asserts, farm reaping implements can be drawn and grain transported from the field to the barn.



LINE-UP OF MAXWELL CARS BEFORE START FOR BOSTON SHOW

Goes to Gump—The A. W. Gump Auto Co., of Los Angeles, has been named as the Jackson representative in southern California.

Schwartz Switches—H. B. Schwartz, formerly with the Acme Automobile Co., is now manager of the Penn Automobile Co., which has been established at 31 Wood street, Reading, Pa.

Wayne Change—A change has been made in the Wayne agency in Columbus, O., Charles E. Bell taking it. The Columbus Scree & Machine Co. was the original appointee.

Joins Babcock Forces—H. E. Wagner, formerly of the Pope-Waverley at Indianapolis, has been appointed manager of the electrical department for the Decauville Automobile Co., of New York city, which is the metropolitan agent for the Babcock line of electrics.

Plant Almost Ready—It is expected by the Woods Motor Vehicle Co. that its new factory at Twenty-fifth street and Calumet avenue, Chicago, will be ready for occupancy by the first of the month. In the new place the Woods company will have three times the floor space of the old place, but even that is not enough, for plans are being made for a three-story addition to care for the 1907 trade.

Quits Horses for Cars—The Antler Stables & Garage Co., of Toledo, O., has disposed of all its horses and vehicles, and will hereafter devote its entire time and attention to the manufacture and care of automobiles. The stockholders of this concern also own the stock of the Cooney Carriage Co., which will soon have a new electric carriage ready for market. The garage is located on Twenty-second

street, in close proximity to that part of the city where the majority of automobile owners reside.

In Franklin Family—The H. H. Franklin Mfg. Co. has established the following new agencies: J. P. Schuyler, Detroit, Mich.; Sidl Automobile Co., Lincoln, Neb.; Powell-Bacon Co., Omaha, Neb.; Sanger Automobile Co., Milwaukee, Wis.

Morgan Manager—Charles Morgan, the grandson of the founder of the Morgan steamship line, who has just returned from a trip through Mexico and the West Indies, is to assume the management of the Crawford car agency at 152 West Fifty-sixth street, New York.

Buckeyes Incorporate—The Safe Storm Front Co., of Fremont, O., is the name of a new concern, which has been incorporated under the laws of Ohio with a capital stock of \$75,000. The company will enlarge its present quarters, and do business on a broader scale than heretofore has been possible.

Durphy Resigns—W. H. Murphy, who succeeded Frank J. Fanning as manager of the Chicago branch of the Electric Vehicle Co., has resigned his position to become manager of the New York branch of the Monarch Typewriter Co. Temporarily Frank B. Morgan, formerly Murphy's assistant, is in charge of the branch.

Gets Spark Plug Patent—The recently formed Association Patents Co., which is an offspring of the Association of Licensed Automobile Manufacturers, after an investigation of legal validity and practical tests of efficiency, has acquired from Edward D. Wheeler the entire rights, title and interest to the Canfield & Mueller spark plug patents. These patents are

claimed to cover primarily all spark plugs with the annular air gap.

Packard Prosperity—The Standard Automobile Co., of Pittsburgh, Packard agent, has increased its stock from \$75,000 to \$125,000, an indication of the prosperity of the automobile trade in the city of Pittsburgh.

Busy Building—The factory of the H. H. Franklin Mfg. Co., at Syracuse, is now running nights. The entire force works until 9 o'clock and part of the men labor all night. Last week over sixty cars were shipped, which was the busiest week in the history of the concern, it is announced.

Takes Over Body Plant—R. F. Monroe, of Pontiac, Mich., has secured control of the Jackson Body Co., of Jackson, Mich., and the name of the concern has been changed to the Monroe Body Co. Mr. Monroe expects to increase the working force from 60 to 120 men. He also has a plant in Pontiac.

Bouton Boosted—George Bouton, formerly electrician for the Amos-Pierce Co., is manager of the Syracuse Storage Battery Co., which has opened a factory and garage at 410 South Warren street, Syracuse. In addition to the manufacture of storage batteries, Mr. Bouton will repair and charge electric vehicles.

Good Year in Pittsburgh—It is estimated that over 1,500 automobiles were in use last year in the Greater Pittsburgh district. This year's sales at present rates will add nearly 1,000 more to the list, making a total of at least \$2,000,000 invested in cars, in addition to fully \$700,000 invested in the automobile business.

Lozier Joins A. L. A. M.—The Lozier Motor Co., of New York, has been admitted to membership in the A. L. A. M. and granted a license to manufacture gasoline automobiles under the Selden basic patent, after having paid back royalties and the initiation fee. This addition to the membership of the A. L. A. M. brings the total up to thirty-eight.

New Motor Plant—The Universal Mfg. Co., which was recently incorporated with a capital stock of \$200,000, at Washington, D. C., has purchased the plant building of the Elmore Furnace Co., at Elmore, O., and will soon begin the manufacture of gasoline motors. It is reported the company will manufacture motors on a large scale. A. Nevins, formerly of Akron, O., is at the head of the concern.

Monarch on Its Feet—The Monarch Motor Car Co., of Chicago, is the successor of the Monarch Automobile Co., of North Aurora, Ill., recently bankrupt. The new company has been incorporated and capitalized for \$150,000, by T. A. Quinlan, Jr., A. B. McCord and J. J. Boucher. Mr. Quinlan is financing the concern, while Mr. McCord is manager. The plant will be located in Chicago and the product will be a runabout similar to the one manufactured by the North Aurora concern, it is said. It is claimed that the machin-

ery and stock of the bankrupt concern which was sold recently was bid in for the new company.

Cars Discussed—The Haynes, Buick and Locomobile were exploited at the trade night of the Long Island Automobile Club last Friday.

Maxwell Trial—One of the features of the Boston show was the running of thirteen Maxwells under their own power from the Pawtucket factory to the Hub exhibition.

More Room—The garage of the Penn Motor Car Co., the home of the Mitchell in Philadelphia, has been greatly enlarged to meet the demands of the coming season's business.

Re-sells the Darracqs—S. B. Stevens, of Rome, N. Y., has resold to the American Darracq Co. three of the five cars he bought at the time of the Hemery flare-up at Ormond. Purchasers were found for them abroad. The 80, which won the Vanderbilt and Havana cups, has been retained for racing in this country.

Snow Stops Test—A. L. Kull, manager of the New York agency of the Wayne, had arranged to start a 6-day non-stop test of the Wayne 50-horsepower car on Monday, but heavy snow storms caused a postponement. Kull, A. C. Schwartz and Charles T. Earl were to have driven the car in 8-hour shifts over a course between Times Square and One Hundred and Tenth street, embracing Broadway, Riverside drive and Fifth avenue.

New Lozier Detail—A change has been made in the Lozier type D 40-horsepower cars as regards the ignition system. Every one of these cars will henceforth be equipped with two separate ignition sets. On one side of the motor, in the covers fitted above the inlet valves, is a set of firing plugs connected to a Remy or Simms-Bosch magneto. In the valve covers of the exhaust valves is another set of independent firing plugs connected to storage battery, accumulators and distributors. The advantages of this double system are obvious. In case of trouble with any spark plug, the other system may immediately be thrown into connection, or in case of complication or trouble with the

magneto or the batteries, the reserve source of electricity may be brought into play.

Homes for Workmen—The Matheson Motor Car Co. has begun the erection of 200 dwellings for the workmen at its Wilkes Barre plant.

Mighty Busy Place—The plant of the Pope Motor Car Co., at Toledo, O., is running nights for the first time in its history. The force of employees has been increased to 1,700 men.

Three New Branches—Charles E. Miller, manufacturer, jobber, exporter and importer of automobile materials, with a home office at 97 Reade street, New York city, announces that his three new branches are open for business. They are at 318-320 North Broad street, Philadelphia; 202-4 Columbus avenue, Boston, and 406 Erie street, Cleveland.

Locomobile Garage—An addition in the shape of a brick garage has recently been added to the factory of the Locomobile Co. of America. The real features of the addition are the doors, ten on each side. Practically the entire side of the building consists of doors which, when lowered, admit plenty of light and which, when down, form an awning. In the photograph four doors are shown in various positions, one partly lifted, others opened wider and one open as far as it will go, giving plenty of clearance for any touring car with the top up. The doors are very easily moved, the weight being balanced so they will stay in position without locking. There are some interesting features about the inside of the garage, one of them being the heating apparatus, which consists of a long pipe running the full length of the room with open ends. Hot air taken from around a steam coil is forced by a blower into this pipe and out through the various openings. A sort of mezzanine floor is located at the end with lockers for the use of chauffeurs. A staircase leading to this floor is hinged so that it may be swung up when not in use, and thus be out of the way. The floor is all concrete and with eight pits. Another feature is the enclosed telephone booth in communication with the office. The company is also

building another brick building one story high and about 45 by 25 feet, in order to relieve the crowded condition of some of the departments.

Fisher's Plans—Carl G. Fisher, of the Fisher Automobile Co., of Indianapolis, will open a garage in Cincinnati, if he can lease a building suitable for the purpose in that city.

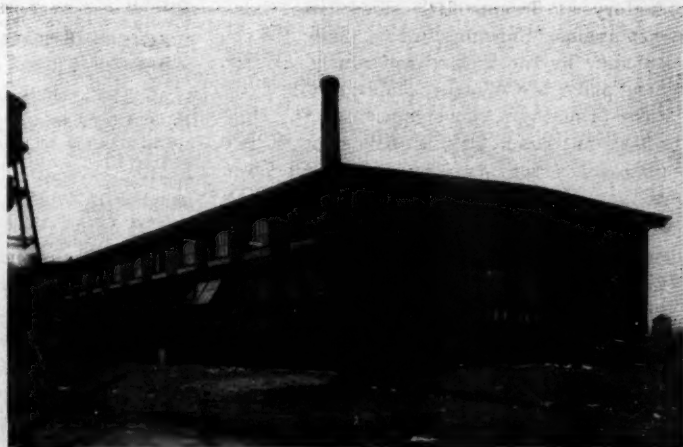
In Its Own Building—The Harbours Tire Co., of New York, after April 1, will conduct its business from its own building, 232 West Fifty-eighth street.

Receives His Electrics—Harry S. Houtt, New York agent for the Thomas Flyers, received last week the first installments of the Rauch & Lang electrics, for which he has taken the metropolitan agency.

Garage Covers Two Blocks—Joe Vendig, the New York bookmaker, is building, at Seagate, a fashionable resort adjoining Coney Island, a big garage, covering two city blocks. It will be completed May 1.

Elect Officers—To show they mean business, members of the Chicago Automobile Dealers' Association met Monday and elected officers as follows: President, Ralph Temple; vice-president, Orlando F. Weber; secretary, James Levy; treasurer, Joseph Gunther; directors, the above and H. Paulman, Walter L. Githens and Fred Pardee. It is the intention of the association to actively start work at once to devise methods for preventing price cutting and perhaps establish a general clearing-house for the trade.

A Reminder—The Electric Vehicle Co., having had plenty of experience with the absent-minded motorist who forgets everything told him about the proper lubrication of his car, has adopted a plan which is rather novel and which is working successfully. A printed sheet with complete instructions for oiling is pasted on the under side of the forward seat and shellaced. Under this plan there is no possibility of the instructions getting lost or even temporarily mislaid. They are always at hand and ready for reference and this practically assures their use. The company also issues more complete general instructions in pamphlet form.



TWO VIEWS OF THE NEW GARAGE ERECTED BY THE LOCOMOBILE CO. OF AMERICA

BRIEF BUSINESS ANNOUNCEMENTS

Milwaukee—Work has been begun on the erection of a new automobile plant at Grand avenue and Seventh street.

San Francisco, Cal.—Arrangements are about completed for the opening of a local agency by the Matheson Motor Car Co.

Independence, Ia.—The Independence Auto & Supply Co. has been sold to J. C. Heald & Co., who will build a large garage on Main street.

Pittsburg—Oscar E. Vestal, connected with the Standard Automobile Co., has just been granted a patent on his friction ring device for a shock absorber.

Boston—Charles H. Smith, Jr., has severed his connection with Chester I. Campbell to take charge of the automobile department of the Johnson Service Co.

New York—Homan & Schultz, agents for the Rambler, National and Marion, moved last week into their fine new garage and salesrooms at 38-40 West Sixty-second street.

Philadelphia—Application has been made for a charter for Smith & Mabley, to buy, sell and deal in automobiles, motor boats, and all parts and accessories, and also to maintain a garage.

Madison, N. J.—Walter B. Schultz, of the firm of Schultz & Dervay, dealers in sporting goods and automobiles, has purchased the interest of F. A. Dervay in the firm and will continue the business himself.

Peoria, Ill.—The Peoria Automobile Co. has secured the lot on Main street adjoining the Masonic Temple, and work is already under way for the excavations for the new two-story building which is to be erected there. Fred H. Smith is a prime mover in the new concern.

Milwaukee, Wis.—Charles A. Welch, of Waukesha, has purchased 75 feet on Grand avenue, near Seventh street, adjoining the Auer estate property, on which he will begin the erection of an automobile plant. He already has 50 feet, for which he paid \$50,000. The last addition cost him \$45,000.

Detroit—Foundations are being dug at the corner of Brush and Jefferson streets for a new garage to be erected by Dodge Brothers. It is estimated that the building now to be put up will cost in the neighborhood of \$30,000. Later on, when the leases of the neighboring property expire, a six-story building will be built.

Utica, N. Y.—The muffler, timer and cut-off valves invented by Herbert S. Powell, of Clinton, are to be manufactured here, the Powell Muffler & Timer Co. having established shops on the second floor of the Mechanics' building on Hotel street. It has closed a deal with Charles H. Childs & Co., who will sell the appliance in Oneida, Herkimer, Otsego, Montgomery, Franklin

and Madison counties, and also with C. E. Miller, who will sell them in New York.

Pontiac, Mich.—The National Body Co., of Mount Pleasant, is about to locate in the C. V. Taylor carriage factory.

Painesville, O.—George W. Blackmore and Mason Dingley will reopen the repair shop formerly conducted by Percy Tinan.

Oil City, Pa.—Lucas & Weaver, representing the Thomas and Oldsmobile in several counties, have opened a new garage at 255 Elm street.

Hartford, Conn.—Work has been begun on the erection of an addition to the plant of the Siemon Hard Rubber Co., manufacturer of insulating compounds.

Newark, N. J.—The factory of J. M. Quinby & Co. has been greatly enlarged. The company also meditates the erection of a garage in the vicinity of this factory.

New York—Progress on the new four-story garage now in course of erection at 225-231 West Forty-ninth street for the new home of the Clement-Bayard company is so satisfactory that Sidney B. Bowman expects to take possession by May 1.



LATE INCORPORATIONS

New York—Mutual Auto Accessories Co. of America; capital stock, \$10,000; to manufacture automobile accessories, etc.; incorporators, T. B. Nesbit, Sidney A. Houch, F. J. Wallace.

Camden, N. J.—Camden & Atlantic Automobile Co.; capital stock, \$25,000; to manufacture automobiles, cars, carriages, boats, etc.; incorporators, I. Dare Goodhart, Jr., Charles Sumner Wesley and M. Leon Berry.

Chicago—Webb & Pine; capital stock, \$2,500; to manufacture automobiles and accessories; incorporators, William Friedman, Harry A. Riley and Morris Friedman.

New York—Atlas Motor Co.; capital, \$1,200; to manufacture motors, motor cars, etc.; incorporators, John Stewart, A. M. Bullowa and H. B. Pruser.

Rutherford, N. J.—Waller Motor Co.; capital stock, \$50,000; to manufacture motor cars, automobiles, etc.; incorporators, William E. and Elwood F. Waller and John M. Bell.

Chicago—Consolidated Equipment Co.; capital stock, \$5,000; to manufacture automobiles and accessories; incorporators, Foree Bain, George T. May, Jr., M. F. Allen.

Boston—Boston Mechanical Co.; capital stock, \$200,000; to deal in automobiles; incorporators, Howard E. Whitney, Christopher F. Whitney and Harry L. Dexter.

Chicago—Scott-Kost Motor Co.; capital stock, \$10,000; to manufacture motors; incorporators, George Scott, Victor Kost and Thomas D. Huff.

New York—Argus Motor Co.; capital stock, \$500; incorporators, E. A. Waechter, Hamburg, Germany; E. M. James and R. W. Hawthorne.

Boston—Milford Automobile Machine Co.; capital stock \$10,000; incorporators, William H. Baker, Shadrack F. Howard and William Hadley.

Chicago—Monarch Motor Car Co.; capital stock, \$150,000; incorporators, T. A. Quinlan, Jr., A. B. McCord and Joseph J. Boucher.

Bergen, N. Y.—Apex Motor Co.; capital stock, \$15,000; incorporators, A. A. Sands, G. E. Parish and F. O. Bullis.

Warren, O.—The Valley Automobile Co. has opened a garage and repair shop and has a floor space of 50 by 110 feet.

Milwaukee, Wis.—A building permit has been taken out for a \$1,500 garage to be built for Dr. Nelson R. Haist at 300 Knapp street.

Bridgeport, Conn.—A firm of western architects is preparing plans for the plant which is to be erected in the east end for the Wolverine Motor Co.

New York—Frank Menair, formerly the Bronx agent for the White steamer, is now associated with Louis C. Howard, the representative of the Jackson car.

Cleveland, O.—The Auto Supply Co. will occupy its new quarters in the near future. It will be located on the north side of Euclid avenue, near Dodge street.

New York—Deacon Holmes, formerly with the Wayne Automobile Co., has joined the selling force of the Peerless agency. Charles T. Earl is also connected with the Peerless company.

Pittsburg—The new Atlas garage has been formally opened. Among other cars, this company represents the Premier and the Maxwell cars. Several sub-agencies are to be established for these cars.

New York—The Cadillac Motor Car Co. is now installed in its new quarters, Broadway and Sixty-second street. It has also opened a Brooklyn branch at 1001-03 Bedford avenue, under the management of J. D. Rourke.

Pittsburg—The Automobile Tire and Repair Station, 5918 Baum street, East End, is something new in the line of a tire repair shop here. A. Kuehlborn, formerly with the Goodrich company, is the proprietor.

New York—The Welch Motor Car Co. has opened a new branch at Broadway and Forty-second street under the management of Burgoyne Hamilton. In the same block will be the Acme Motor Co. and the Homan & Schultz Co.

Portland, Me.—The Portland savings bank has purchased the building on Spring street, formerly occupied by the car barns of the Portland Railroad Co. It will be torn down and a garage built there for the Willard Automobile Co.

Washington, D. C.—Plans are now being prepared by Arthur B. Heaton for the erection of a one-story addition to the house at the corner of Seventeenth and U streets northwest, which will be used for an automobile garage.

Chattanooga, Tenn.—Henry D. Stebbs has opened a new automobile store and garage at 725 Cherry street, to be known as the H. D. Stebbs Automobile Co., which will be the sole agents for the Reo and Rambler. In addition to selling automobiles, it will do a general repair business.

ness. Frank C. Hoke, of Cincinnati, will be in charge of the machine shop.

New York—L. LeRoy Moody, formerly with Norris Mason, is the new manager of the Napier Motor Car Co., of New York. Walter L. Woods, the former manager, has been made secretary and treasurer of the main office in Boston.

Kansas City, Mo.—The Kansas City Motor Car Co., the outgrowth of the Caps Bros. Co., has moved to the new plant near Sheffield, and will engage in the manufacturing of automobiles and delivery wagons on an extensive scale.

Youngstown, O.—The Standard Automobile Garage, of 234 North Phelps street, has added the Buick to its line of cars. The company, which is under the management of E. Hippard, is already the agent for the Franklin, Orient, Knox and Pope-Waverley.

Morristown, N. J.—Victor A. Wiss and his brother, Thomas H. Wiss, have formed a partnership and the new name will be Victor A. Wiss & Brother. In the new garage they will build on Pine street they will have a total floor space of 9,000 feet. They hope to be in the new place by June 1.

West Brookline, Mass.—D. P. Nichols & Co. have taken up the designing and building of special bodies to suit the desire of the owners, or the fitting of old chassis with modern bodies. A four-story building, thoroughly equipped, is devoted to the repairing of automobiles and the building of bodies and tops.

AUTOMOBILE LITERATURE

C. L. Altemus & Co., Philadelphia, has a neat but comprehensive folder on the 1906 Ideal timer. Two illustrations and complete description are included.

The Moline Automobile Co., East Moline, Ill., outlines the many points of its present cars in a small-sized catalogue in which views of the cars are shown.

The J. H. Sager Co., Rochester, N. Y., is making the Sager equalizing spring, which serves as a shock absorber, and has the device illustrated and described in a four-page folder.

The E. H. V. Co., Middletown, Conn., builder of the Compound cars, has a small booklet in which the motor and chassis are shown as well as views of all the models built. Many arguments in favor of the compound motor are given, besides a full description of the machines.

The Smith Auto Co., Topeka, Kan., maker of four-cylinder vertical motored automobiles of the touring car type, has issued its present catalogue in two volumes, officially known as Volume 1 and Volume 2. The former is a most comprehensive treatise on the automobile in general and contains forty-five pages filled with closely written pages on every part of the motor car, giving the impression of an information book for beginners with automobiles rather than a catalogue. The second volume is much smaller. The information is good and could be read to advantage by any parties going into the

business. Several illustrations of the Smith car are given. The second volume, of catalogue size, contains but a score of pages and is styled "Helps for the Motorist."

Under title of the "Franklin Auxiliary Exhaust," the H. H. Franklin Mfg. Co., of Syracuse, N. Y., gives an eight-page exposition of the workings and merits of this exhausting system. The matter is in booklet form.

Taking the title of "The Buick How and Why," the Pence Automobile Co., of Minneapolis, Minn., publishes a humorous booklet on the merits of this machine. By the assistance of an illustrator the numerous pages are given an atmosphere of humor so often lacking in pamphlets of this character.

From Kansas City, Mo., comes the catalogue of the Pitless Turntable Co., in which is illustrated the pitless turntable for private and public garages. Heavily enameled paper is used. Having very wide margins with but a paragraph of reading matter on each page and an illustration on the opposite page, it gives a good effect.

The many motor car supplies carried by the Beckley-Ralston Co., Chicago, are listed in a small-sized 100-page catalogue recently issued. The small size is at variation with the accepted style of supply house catalogue. The extra thickness, however, gives the catalogue considerable of a book appearance and makes it suitable for pocket use.

THE INTERNATIONAL EXCHANGE

Market in South Africa—There is a promising market in South Africa for automobile vans and ploughs run by steam or other power.

Show in Buenos Ayres—It is reported that the Argentine Automobile Club will hold an automobile show at Buenos Ayres in September next, and that foreign exhibits will be admitted free of duty if re-exported within 90 days.

Imports into India Increase—During the past year the imports of automobiles into Bombay, India, have shown an increase of more than 26 per cent, the year's imports of cars and parts amounting in value to more than \$320,000. The business is developing rapidly and there is a fair amount of competition. The United States is getting a portion of the trade.

Used in Argentine—Automobiles are being used in Argentine Republic in connection with the postal department, fire department and the ambulance service, and the demand for them in other lines of transportation is increasing. Owing to the reduction of the duty on motor cars from 50 to 12 per cent, there has been an increase in the imports, and it is not im-

probable that a great demand for cars will arise when their utility becomes better understood.

China in Line—Through the Automobile Club of China it is learned there is a growing demand for automobiles in that country, and one American has urged that his countrymen investigate the outlook in the orient.

Bad in Brazil—The circumstances which militate at present against the development of the automobile trade in Rio de Janeiro, Brazil, are the bad condition of the roads, and also the prohibitive import duties, which amount to 60 per cent ad valorem on complete cars and 50 per cent on parts for repairs. These unfavorable conditions are, however, likely to be in a great part modified in the near future. During the past few months road improvements have been undertaken and are making rapid progress. Furthermore, it is proposed to reduce the import duties to 7 per cent on complete cars, and to 5 per cent on accessories and parts. Some of the deputies in the Brazilian congress demanded the entire removal of the duties until such time as home industry can undertake the manufacture of automobiles.

A reduction in the duties is certain, the movement being due to the wealthy classes, from whom a good demand for cars may be anticipated in the near future. Several propositions are also on foot to introduce motor vehicles into the public service of Brazil. The time has, therefore, arrived for American manufacturers to give immediate attention to the Brazilian automobile market.

Go Good in Greece—The movement in favor of the use of automobiles in Greece appears to be growing, although the roads are not very good. Nevertheless, for several months past many of the wealthier people, following the example of the royal family, have imported cars, and the impulse which this has given to the automobile deserves the attention of American manufacturers. A company is said to be in the course of formation at Athens with the object of providing certain urban and suburban public motor services. It is proposed to inaugurate a regular service between Athens and Phalerum. The traffic between these cities is heavy, connected as they are by a fine road, and satisfactory results should accrue from the proposed undertaking, which will be the pioneer.

Current Automobile Patents



Unique Motor Support—No. 814,991, dated March 13; to Alfred C. Stewart, Los Angeles, Cal.—Two upper truss rods A are attached at their upper ends in recesses near the head of the motor cylinder and at their lower ends are received pivotally in pieces D bolted direct to the frame pieces C. A pair of lower truss rods B are disposed oppositely to the pair A, being attached at their lower ends to the motor crankcase, and rising like the arms of the letter V are secured at the outer ends in sockets in the pieces D.

Speed Recorder—No. 815,303, dated March 13; to John A. Woods, New York, N. Y.—Three distinct uses are served by the speed indicator referred to in this patent. On a scale D, carried on the dash of the car, is shown the speed in miles per hour by a pointer which rises in the gauge proportionately to the speed of the car. E shows an electric bell which can be set to ring when the speed of the car reaches any limit such as the speed ordinance in the city in which it is used. C is a roll of paper which constantly unwinds off one roll on to another in direct proportion to the speed of the car and on this paper a needle carried on the arm B leaves a tracing line which shows the exact speed of the car throughout the trip. This needle and the lever B are controlled by

the governor weights F on the driven shaft A. On fast speeds these weights are thrown out by centrifugal force and the lever B being attached at its inner end to a movable sleeve, controlled by these governor weights, has its position changed with every variation of speed. On slow traveling, the point of the needle will rest as shown on the illustration but on fast speeds, the balls F are thrown out and the short end of the lever B is drawn down so that the other end of the lever will move to the top of the spool C and be held there as long as the high speed is maintained.

Fiber Body Work—No. 814,823, dated March 13; to Harry E. Bradner, Lansing, Mich.—Any style of main frame work A is used for the bottoms and backs of seats in the ordinary automobile and hard fiber, suitably moulded to conform to the seat curvature. These pieces of fiber of various designs, as shown at B, are fastened in place by rivets or other means.

Spring Shock Absorber—No. 815,188, dated March 13; to Albert Mans, Dieghem, Belgium—In this shock absorber the axle part A is attached to the car axle and carries the vertical sleeve B, in which is a central horizontal partition. A cylinder C is pivoted to the body part of a car and is made to telescope within the sleeve B. Within this sleeve is a coil spring. On the lower side of the par-

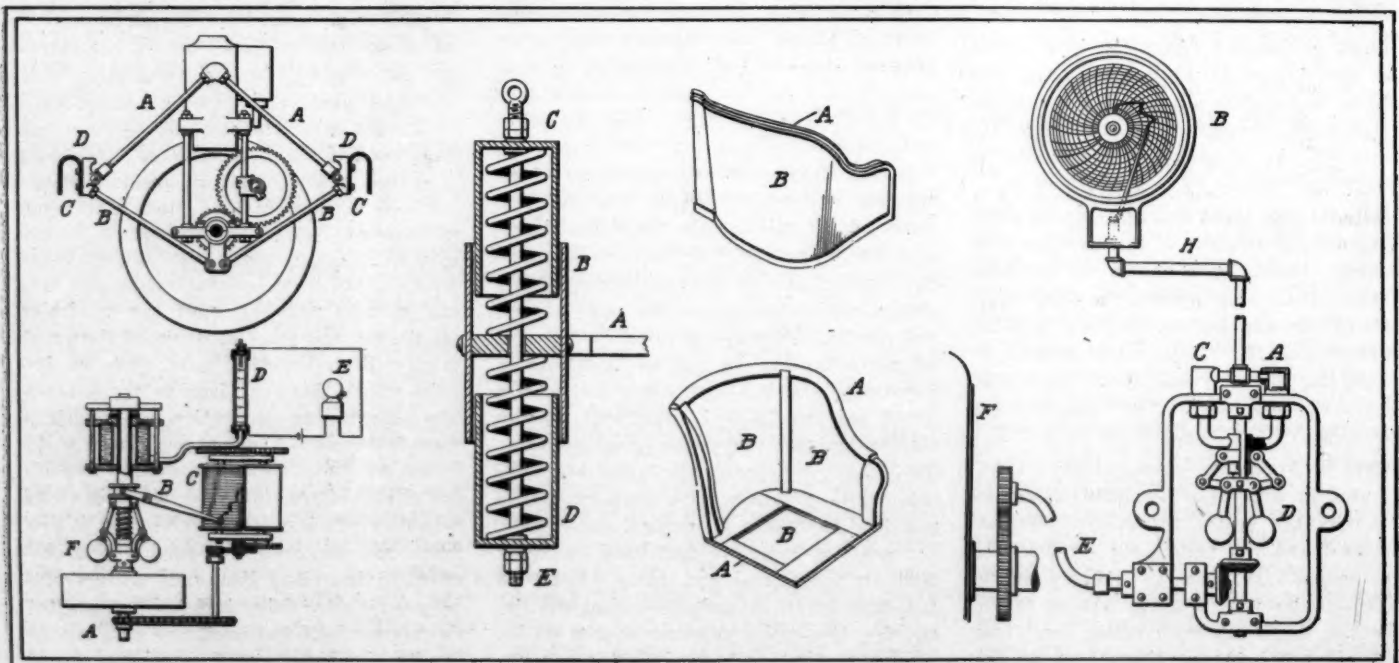
tition in the sleeve B is a cap piece D supported through the central bolt E and containing within it a coil spring. Both coil springs rest against the partition in the sleeve B. On a quick jolt the car's weight is carried on the upper coil spring and the rebound is cared for by the lower coil.

Speed Recorder—No. 814,905, dated March 13; to Charles O. Ericson, Helmetta, N. J.—In this speed recorder the mechanism is operated from the road wheel F of the automobile through a flexible shaft E. From this shaft a set of bevel gears drives a vertical shaft carrying the governor weights D. The top of this shaft has connection with a pair of pumps C and A, and from these pumps by tube H connection is had with the needle indicator on the disk B. As the speed of the car varies, the pressure of the liquid in the sleeve H changes and the needle registering on the disk B is carried closer to the center or nearer to the circumference of the disk. This disk is caused to rotate and receives a continuous line impression from the recording needle.

Combined Cyclometer and Tachometer—No. 813,681, dated February 27; to Charles H. Warner, Beloit, Wis.—MOTOR AGE readers are familiar with the Warner tachometer which registers the speed at which an automobile travels by means of a revolving magnet above which, and separated entirely from, is a metal disk carrying an indicator for showing the speed of the car, the theory of the device being that the attraction of the magnet on the disk is directly proportional to the speed of the former. The inventor now, however, couples with this tachometer a cyclometer which is supported in the same casting as the tachometer and is driven from the shaft.

STEWART'S TRUSS ROD SUPPORT FOR AUTOMOBILE ENGINES

FIBER WORK FOR VEHICLE SEATS AND MOTOR CAR BODIES



WOODS' SPEED RECORDER

DIEGHEM'S SHOCK ABSORBER

ERICSON'S SPEED RECORDER